NYAYA

THE SCIENCE OF THOUGHT

BY

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The Practical Path, etc., etc.

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श्री वीतरागाय नमः

It was customary with the ancients to offer obeisance to he *Holy Tirthamkara* (God), by praising His divine qualities, before commencing any religious or educational work, so as to destroy and burn up, by the fire of contemplation of divine glory, all predisposition to bigotry, prejudice and other like causes of wrong knowledge. Having the same object in view, I also bow to the pure *Veetraga* (passionless) *Arhanta* (God), who has attained to omniscience by the destruction of the knowledge-obstructing energies of *Karma*, in whose all-embracing *Jnana* scintillate, like stars in the infinite firmament, all the objects of knowledge of the three periods of Time, the past, present and future, and whose Word is the final authority to be appealed to in case of doubt and dispute.

C. R. JAIN

PREFACE.

'The Science of Thought' is intended to be a brief exposition of the view of Jaina Philosophy on the nature and types of *Jnana* (knowledge) and the working of the mind in reference to logical inference. The book is principally based on two small treatises, the *Pariksha Mukha* and the *Nyaya Dipika,* though it is not a translation of either of them.

The author of the first-named work was a certain *Acharya* (philosopher-saint) known by the name of *Sri Manikyananda,* who flourished about the commencement of the ninth century of the Christian era. The other book, the Nyaya Dipika, is a much later work, and was composed by *Yati Dharmabhusana* about the year 1600 A. D. Both the *Pariksha Mukha* and the *Nyaya Dipika* are, however, based on earlier and bigger works, and do not claim to be exhaustive.

In presenting to the modern reader the views of the Jaina *Siddhanta* (Philosophy) on such an important subject as the *Science of Thought,* I cannot help giving expression to a consciousness of inability to do full justice to this important department of knowledge,

but am borne up by the hope that the book may succeed in attracting to the field of research more competent scholars who may be able to bring out the excellence of the Jaina view better than I have been able to do.

HARDOI :
15th November, 1916 C. R. JAIN.

PREFACE TO THE SECOND EDITION.

The present edition is not a mere reprint. Important additions have been made to the subject-matter, and several of the chapters have been revised and re-written in part. The appendices are entirely new, and incorporate certain elucidative articles and notes and extracts from some of my other works, including "Logic For Boys and Girls" which was separately published in pamphlet form originally.

HARDOI
17th December, 1924. C. R. JAIN.

NYAYĀ

THE SCIENCE OF THOUGHT.

CHAPTER I.

The word *Nyaya* generally means a path or way, but in connection with philosophy it implies the method of accurate thinking, hence, the system of Logic, or, in general terms, the Science of Thought, which aims at the acquisition of right knowledge or truth.

Right knowledge may be defined as that which is destructive of ignorance, the chief cause of mishaps.

There are three kinds of ignorance, namely, (1) *sansaya* (doubt), (2) *viparyaya* (wrong knowledge) and (3) *anadhyavasāya* (absence of knowledge).

Doubt is the state of uncertainty about the correctness of two or more possible views of a fact.

Viparyaya signifies knowledge which is untrue, *e. g.*, the idea that the whitish, shining surface of an oyster-shell contains silver.

Anadhyavasāya is the state of mind which implies an attitude of indifference, indefiniteness or agnosticism. It is the state of consciousness in which the

mind is aware of the existence of an object but does not know what it really is.

Knowledge which is free from these three blemishes, that is to say which cognises the objects of knowledge as they exist in nature, is called *prāmaṇa* (valid knowledge).

CHAPTER II

Nikshepa (nomenclature) is the first necessary preliminary for metaphysical enquiry, for no progress is possible in abstract thought in the absence of a verbal mark to represent objects and things and their attributes. *Nikshepa* is of four kinds, namely :—

1. *Nama nikshepa*, that is naming at random, without any significance being attached to the name, *e.g.*, calling a man Wolf, or Hathi Singh (lion-elephant).

2. *Sthāpanā nikshepa*, which is with reference to certain real or imaginary attributes mentally transferred to the object to be named, *e.g.*, 'this is Bhagwan Mahavira' (said of a consecrated statue of the *Tirthamkara*) ; 'this is a knight,' a 'bishop,' a ' king,' etc., (said of the pieces employed in the game of chess).

3. *Dravya nikshepa*, that is naming with reference to the inherent potentialities of an object, *e.g.*, to call a *raj-kumar* (prince), raja (king).

4. *Bhāva nikshepa* which bears reference to a function, *e.g.*, to call a man devotee, because of his being engaged in the performance of devotional service.

CHAPTER III.

Right knowledge depends on accurate observation and thought, and accurate thinking implies exact description of things.

The very first step towards accuracy of thought is to give a name to the subject of enquiry. This is called *uddesa*, and is obviously a necessary step in the science of thought, for no discourse or discussion is possible without first naming or otherwise marking out the subject of controversy.

The object of defining a thing is to enable it to be distinguished from all other things. Therefore, every true definition must mention the distinguishing feature (*lakṣana*) of the object to be defined (*lakṣya*).

A *lakṣana* may be either (1) *ātmabhuta*, *i.e.*, an inseparable property of the *lakṣya*, as heat, of fire, or (2) *anātmabhuta* which is not an inseparable attribute of the thing defined, *e.g.*, beard, of man. The main feature of distinction between these two kinds

of *lakṣana* lies in the fact that while the absence of the *ātmabhuta* quality would at once make the thing to be defined non-existent (*e.g.*, fire without heat), the destruction of the *anātmabhuta* would not be fatal to its existence, *e.g.*, a beardless man.

Every true *lakṣana* should be free from the following kinds of faults :—

(1) *Avyāpti* (non-prevalence or non-distribution amongst all the members of a class), as in the statement, ' man is a bearded being.' Here it is clear that the beard is not a distinguishing feature of all human beings, for females and children do not grow it.

(2) *Ativyāpti* (over-prevalence) which occurs when the feature is also found in things other than the *lakṣya*. The statement : ' the parrot is a winged creature,' is an instance of this defect, for all birds have wings.

(3) *Asambhava* or that which is contradicted by perception or some other kind of knowledge. To describe man as possessed of horns is an instance of this kind of blemish.

Thus, the true *lakṣana* is a quality which is actually found in every member of the class but which does not exist outside it.

CHAPTER IV.

Right thinking has for its concomitants the ideas of (1) *dravya*, (2) *kshetra*, (3) *kāla*, and (4) *bhāva*.

1. *Dravya* (substance) signifies the substantive basis of a thing, as matter is the substantive basis of all material things, and Spirit of all living beings. All *dravyas* are eternal, because substance is a simple thing, not a compound or a compounded effect of anything else. Being simple, they are not composed of parts, and cannot, therefore, be cut up into fragments and bits, nor destroyed in any other way. Things that are subject to division, disintegration or destruction are compounds which are resolvable into their component parts. Hence, all real substances are eternal, though their compounds are transitory and perishable. Logic and rational thought are only possible on the basis of the eternity of substance (this is what is termed the law of constancy of substance), for otherwise things will appear and vanish like illusory effects, and there will be no reliable permanent logical relationships between different objects on the strength of which a deduction could be supported or drawn.

Substance is the substrate of attributes which inhere in it. The relation between substance and attributes is eternal likewise, for a substance is but

the substrate of attributes which all inhere in it. The two are not separable except by pure mental abstraction, for substances are only bundles of attributes *e.g.*, gold which is the sum-total of all its attributes—materiality, yellowness, heaviness, brightness, etc., etc.,—and nothing apart from them, while yellowness, brightness, and the like cannot be deemed to be existing separately from one another and without any substratum of substantiveness.

Attributes are to be distinguished from accidents which are passing phases, forms or modes of existence of substances, *e. g.*, a gold ring is a particular mode or form of gold. The distinction between an accident and an attribute consists in the fact that while the accident is a changing impermanent state of existence of a thing, an attribute is inseparable from it, and is an inalienable property of it for all times, though subject to differences of degrees of manifestation under extraneous conditions, *e. g.*, the attributes of gold are liable to be affected by the admixture of alloy, in proportion to its quantity.

2. *Kshetra* signifies space, but in metaphysics it might mean either the place or locality where a thing may be existing, or the size and dimensions of the thing with reference to the area of space it occupies.

3. *Kāla* denotes time, the 'when' as distinguished from the 'where' of *kshetra*. It also means the form in which a thing may be existing, because forms undergo change in time, or under the influence of time.

4. *Bhāva* is the inner nature or state of a thing, e. g., intention, feelings and the like.

CHAPTER V.

All things are knowable, that is to say they are capable of being the object of knowledge on the part of some one or other. That which is not capable of being known by any one at all cannot have an existence, for that which is not provable is not existent. Hence, if things exist, they must admit of proof. But things which are beyond the ken of knowing beings are incapable of being proved. Therefore, that which will never be known to any one at all is non-existent. Were it otherwise, we would be proving that of which we have no knowledge whatsoever, and the very existence of which we have absolutely no reason to affirm.* Therefore, all things are knowable.

* From the scientific side of the question also it is obvious that things are known through their relations and effects even when not perceivable directly by the senses, e g., ether which is not directly perceived but which is known through its relations with other things. Hence, what will never be known to

CHAPTER VI.

Consciousness is the function of an unique substance, termed spirit, which differs from matter in this respect. It is not the function, property or secretion of matter or of the material brain; for consciousness is individualistic and psychic while the brain is com-

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any one at all must *ex-hypothesi* be incapable of being perceived both directly by the senses as well as indirectly, through its relations and effects But what never enters into relations with other things and produces no effects in or through them can only exist outside the range and sphere of existent things, hence beyond the universe, and therefore beyond existence itself. The argument that if there were no knowing beings left before the completion of scientific enquiry, things must necessarily remain unknown, is beside the point, for the knowability of things is not affected by the presence or absence of knowing beings The unknownable, thus, is not a mere synonym for the unknown, but contains the additional attribute of never being known although there may be competent knowing beings in existence and engaged in the investigation of truth Hence, if there be no knowing beings to know things, they will simply remain unknown; the absence of investigators cannot invest them with unknowability,

The proposition that it is conceivable by the mind that there may be an object endowed with an infinity of attributes some of which will never be known to any one, is equally untenable. For the argument which proves that things are knowable also suffices to prove that the attributes, too, cannot be unknowable. Obviously we shall never have any reason to affirm the existence of an attribute which is altogether unknowable by nature.

posite and non-psychic. * The theory that a primary nucleus of tactile sensations, bound up in the simple atom of matter, has, in the course of evolution, evolved out into the highly complex consciousness of man, is not valid, as it is inconceivable how a simple sensation of touch can possibly transform itself into taste, smell, sight, hearing, understanding, ratiocination and the like.

CHAPTER VII.

The soul is a reality, or substance, because it

* The individuality of spirit, the soul-substance, is evident from the fact that no one ever feels himself like a corporation. Matter can have no individuality except what may be bound up within the four corners of its atom. But an atomic individuality is counter-indicated in the case of living beings, since they are physically composed of myriads of atoms and yet have no notion of a multiplicity of the ego Apart from this, an atomic individuality would be altogether inalienable, for an atom, being a simple unit in itself, is not endowed with alienable properties Hence all the atoms composing the human brain, or at least the most conscious portion of it, would retain their own individualities and would be self-assertive in an equal degree Such a crowded and crowd-like individuality is, however, never testified to by our consciousness which is unitary and neither multitudinous nor like a county-councillors' board. The psychic nature of the conscious substance is also fatal to the theory that it is the product or secretion of matter. What is meant is that consciousness is endowed with an interior which is capable of entertaining and developing an infinity of ideas and concepts; but the atom of matter has no inside to it in which to accommodate even a thought.

exists, and because existence is a quality of substance.* If existence were not a quality of substance, it would appertain to that which is devoid of all substantiveness. But that which is devoid of substantiveness cannot be the substrate of any quality whatsoever, because qualities only inhere in substances. Hence, if existence were not a quality of substance, it would appertain to that which is incapable of being the subject of any quality whatsoever and, therefore, also of existence, which contradicts the proposition itself. Therefore, existence is an attribute of substance, and, conversely, that which exists must be a substance.

* The word substance used in connection with the soul need cause us no alarm, since it merely denotes subsistence, existence or being, and is not confined to matter. "In philosophy, substance is that which underlies or is the permanent subject or cause of all phenomena, whether material or spiritual, the subject which we imagine to underlie the attributes or qualities by which alone we are conscious of existence, that which exists independently and unchangeably, in contradistinction to *accident*, which denotes any of the changes of changeable phenomena in substance, whether these phenomena are necessary or casual, in which latter case they are called *accidents* in a narrower sense .. Substance is, with respect to the mind, a merely logical distinction from its attributes We can never imagine it, but we are compelled to assume it. We cannot conceive substance shorn of its attributes, because those attributes are the sole staple of our conceptions; but we must assume that substance is something different from its attributes" (The Imperial Dictionary). Thus everything that exists must have some sort of substantiveness or subsistence; and it is this substantiveness or subsistence which is called

CHAPTER VIII.

Knowledge is the nature of the soul. If it were not the nature of the soul, it would be either the nature of the not-soul, or of nothing whatsoever. But in the former case, the unconscious would become the conscious, and the soul would be unable to know itself or any one else, for it would then be devoid of consciousness ; and, in the latter, there would be no knowledge, nor conscious beings in existence, which, happily, is not the case.

It might be urged that knowledge, consciousness, or the power to know or cognize is an independent quality which. when it comes in contact with the soul, enables it to perceive and know itself and other things, but this is untenable on the ground that qualities only inhere in substances * and cannot be conceived to exist independently of concrete things. The fact is

substance. As spinoza puts it, "existence appertains to the nature of substance , It is in this sense that the word substance is employed in philosophy. Thus souls and matter are both substances though of different natures, as is evident from their attributes

* That qualities inhere in substances is a self-evident truth, for they cannot be conceived to exist by themselves. If they could lead an existence independently of substance, we should have softness, hardness, manhood and the like also existing by themselves, which would be absurd. Moreover, if qualities were capable of leading an independent existence of their own, *existence* also would exist separately from all other

that qualities are pure mental abstractions made after observation of a number of individuals ; no one has ever seen them existing by themselves.

Besides, it is permissible to ask whether consciousness as a quality be indivisible or composed of units ? Now if we say that it is composed of units then the numerous units of conciousness are really only so many concrete individuals. On the other hand, if it be said that consciousness is an indivisible existence, then it must be all-pervading, so as to be able to enter into the constitution of every living being at different places in the world. But on this hypothesis the real knower or source of knowledge being one and the same throughout the universe, there should be no differences in respect of knowledge among the individuals, which is not the case, as every one's experience shows.

There is only one other alternative, and that is that the quality exists by itself and is all-pervading but the differences arise from external obstructing causes, namely bodies of matter. But the question is,

qualities. But this would make existence itself a featureless function or attribute of nothing whatsoever, on the one hand, and all the other remaining qualities simply non-existent, on the other, because existence would no longer be associated with them. It follows, therefore, that qualities cannot be conceived to exist apart from substances.

was this all-pervading consciousness individualistic or pluralistic in respect of self-knowledge, that is to say, did it know itself as one or many, before it encountered the causes of obstruction? If the former, then it could never be split up subsequently into the existing multiplicity of knowing beings, since it is inconceivable how external obstruction can give rise to a multiplicity of internal conscious states, in a single unit or individual. If the latter, the external obstruction is not needed to explain it, since the multiplicity is already given. It is, however, in actual conflict with the nature of consciousness which is always individualistic, and never multitudinous, in regard to self-*feeling*.

It follows, therefore, that consciousness cannot be separated from the soul. The absurdity of the opposite view may be further emphasized by studying the nature of both when separated from each other. Firstly, consciousness separated from a knowing being would exist either as a knower, or as an object of knowledge. But not as a knower, for in that case the separation would mean nothing ; nor yet as an object of knowledge, for as an object of knowledge it would only enjoy knowability, but not knowingness or cognisance.

Secondly, the soul separated from consciousness can exist only either as a knower, or as devoid of knowledge. But in the former case consciousness adds nothing to it, and may be ignored; and in the latter, it is inconceivable how a thing whose nature is ignorance * can ever become a knower by its union with consciousness. It is thus clear that consciousness is nothing but the nature or function of the soul; in other words, the soul is a substance which is characterised by knowledge or consciousness.

CHAPTER IX.

Every living being is endowed with the capacity for infinite knowledge, because (1) all things are knowable, and (2) because knowledge, or consciousness, is the very essence of the soul.

In respect of the quality of knowability, it is sufficient to say that everything that has existence for its

* If any one would seriously reflect on the difference between a living being and a looking glass in respect of knowledge, he would not be long in discovering that the former is capable of feeling the states of his consciousness, *i.e.*, the modifications of the substance of his being, while the latter is not. Hence the image in the glass is not perceived by the glass, while an impression in consciousness is immediately cognized by the soul.

characteristic must be known to at least one soul, as already proved. But since all souls are alike as regards their substantive or potential nature, they must all be endowed with the same or an equal capacity in respect of knowledge. Hence, what one soul can know all others can also become aware of.

As regards consciousness also, it is evident that the soul cannot but be possessed of the potency for infinite knowledge, unlimited by Time or Space, for knowledge consists in the modifications or aspects of its own substance (consciousness).

Putting these conclusions together, we arrive at the inference that the soul's consciousness or knowing capacity is unlimited within the range of the possible, so that only the impossible lies beyond its knowing capacity. But since all that exists is also limited to the possible in nature, and since the possible in nature corresponds to the possible in knowledge, on account of the quality of knowability which has been seen to be an inalienable attribute of things, it follows, with the certainty of logic, that nothing that the soul can never know can ever actually happen or exist in nature.

Therefore, all souls are endowed with potential omniscience.

Some people think that it would be more conducive to their peace of mind to have only one omniscient soul, but this is untenable on the ground that souls being pure spirit in reality, the essential nature of one must naturally and necessarily be the essential nature of all others. Thus, there would be no differences in the possibility of development in respect of knowledge among different souls, although they might differ from one another in so far as its actual manifestation is concerned

Thus, the positing of only one omniscient soul together with a large number of those with limited knowledge is clearly an instance of illogical thought. There can be differences in respect of the natural attributes or function of beings only if they differ from one another in respect of their substantive nature, but the fact that consciousness is common to them all, including the one postulated omniscient soul, shows that they are not different from one another in that respect.

There remains the possibility of our postulating the presence of an extra conscious quality in the one omniscient soul, but even this supposition does not advance its case any further, because pure spirit is not a compound but a simple substance, or reality. Nor can it be called a compound without being

deprived of its immortality, since all compounded effects are liable to dissolve and disintegrate. It follows from this that the one omniscient soul cannot be a real entity, or thing in itself, if it is to be regarded as a compound of the ordinary consciousness *plus* an extra conscious quality.

Furthermore, the only substance which can become associated with spirit, is matter, an unconscious material which can only act as a veil to curtail knowledge, but which is otherwise quite incapable of augmenting* it in the least.

We thus conclude that omniscience is the very nature of the soul-substance, not of any particular soul exclusively.

Those who deny the possibility of omniscience on the authority of certain pious *rishis* (saints) forget that if testimony were admitted on the point it would necessarily end by proving that which it was adduced

* The common error of materialism which imagines that musk, coffee and other similar substances actually give rise to consciousness seems to have arisen from the fact that these substances stimulate the nerves and thereby partially remove the obstacles from the path of the little 'gleam' with which we adjust our daily affairs It is, however, quite inconceivable how an unconscious thing can possibly give rise to or increase the quantity of consciousness, when even the knowledge of one soul—a conscious being—cannot be tacked on to another's.

to refute, for he who would deny the very possibility of omniscience in others would have to be omniscient himself.

CHAPTER X.

Subjectively knowledge signifies a state of consciousness. * Objectively it means any system or code of science or laws, *e. g.*, rules of arithmetic, logic, jurisprudence.

* If any one will pause and reflect over what is implied in the term knowledge—observation, investigation, classification, comparison, inference interpretation, judgment, etc , etc.,—and recollection, he will not, I am sure, refuse to lend his assent to the following considered dictum from the pen of Prof. Bowne (see Bowne's Metaphysics, pp. 407—410) :—

"By describing the mind as a waxen tablet, and things as impressing themselves upon it, we seem to get a great insight until we think to ask where this extended tablet is, and how things stamp themselves on it, and how the perceptive act could be explained even if they did ....The immediate antecedents of sensation and perception are a series of nervous changes in the brain. Whatever we know of the outer world is revealed only in and through these nervous changes. But these are totally unlike the objects assumed to exist as their causes. If we might conceive the mind as in the light, and in direct contact with its objects, the imagination at least would be comforted, but when we concieve the mind as coming in contact with the outer world only in the dark chamber of the skull, and then not in contact with the objects perceived, but *only with a series of nerve changes of which, moreover, it* knows nothing, it is plain that the object is a long way off. All talk of pictures, impressions, etc., ceases because of the lack

CHAPTER XI.

Perception is a kind of affection, state or feeling of the perceiving consciousness. As such it can only be experienced within the four corners of the perceiving

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of all the conditions to give such figures any meaning. It is not even clear that we shall ever find our way out of the darkness into the world of light and reality again. We begin with complete trust in physics and the senses, and are forthwith led away from the object into a nervous labyrinth, where the object is totally displaced by a set of nervous changes which are totally unlike anything but themselves. Finally, we land in the dark chamber of the skull. The object has gone completely, and knowledge has not yet appeared. Nervous signs are the raw material of all knowledge of the outer world, according to the most decided realism. But in order to pass beyond these signs into a knowledge of the outer world, *we must posit an interpreter who shall read back these signs into their objective meaning. But that interpreter, again, must implicitly contain the meaning of the universe within itself;* and these signs are really but excitations which cause the soul to *unfold what is within itself.* Inasmuch as by common consent the soul communicates with the outer world only through these signs, and never comes nearer to the object than such signs, can bring it, it follows that the principles of interpretation must be in the mind itself, and that the *resulting construction is primarily only an expression of the mind's own nature.* All reaction is of this sort, it expresses the nature of the reacting agent, and knowledge comes under the same head."

I have underlined the important passages in this lucid statement of Prof Bowne's to emphasize the point. We can now see that education, from e, out, and *duco*, to lead, is, really, the bringing of knowledge out of the recesses of the mind, as the etymology of the word rightly points out.

Let us now turn to the hypothesis that the brain is the producer of consciousness for a moment. We know that the brain is not a permanent substance, the matter of which it is

consciousness, not outside it, inasmuch as one's affections and states cannot exist away from one's actual being or self.

Sensory stimulus comes from the object in sense-perception. A modification of the existing state of consciousness is then effected by it, on account of the operation of attention, and perception results.

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composed is constantly passing out and being replaced by other such matter We also know and can take it as an indisputable fact that this changing perishable brain cannot give rise to aught but momentary products which exist for a moment and pass out almost as rapidly as they are formed A consciousness that is produced by such a brain must resemble, then, a rapidly rushing stream in which the same volume of water is never at a place for more than a moment. Or we may liken it to a continuous series of flashes of light which are not continuous in themselves. Now, we know the amount of education, the years of toil and hard work that are necessary to produce a Kant, a Schopenhauer or a Lloyd George, and we have just seen, in the quotation from Prof Bowne's work, what is implied in knowledge and the interpretation of nervous signs. We may now ask ourselves knowing all this, whether we can think of or in any way imagine a method whereby the knowledge the education and the general mental equipment of a passing flash of consciousness can be instantaneously transferred, whole and entire, to another such flash of illumination that follows on its heels, and is being pushed by yet another member of its tribe eager to take its place? Nay, can we further conceive how complex mental processes can be carried on, without interruption or break, through long hours, with the aid of these self-taught meteor-like infant prodigies of the brain, and in the total absence of an enduring reasoner? To me the whole supposition appears to be nothing short of the miraculous, and I reject it as such

If no modification of the existing conscious state is effected there is no perception. When attention is engrossed elsewhere there is no perception, except of the object with which the attention is engaged exclusively.

The function of attention is clearly perceived in the case of food actually placed on the tongue when attention gives rise to its taste and the absence of it to no knowledge concerning its close contact or properties, though in both the cases the food passes down the same channel into the same receptacle. This shows that the perceiving consciousness is enabled with the aid of attention to extract and attract to itself something of the subtler elements of the sensory excitation, which, combining with it, in a chemical manner, produces characteristic modifications of its states. These modifications of its states are felt by the self-conscious substance, the soul, as different kinds of sensations. Hence, when there is no modification of the state of consciousness there is no perception.

CHAPTER XII.

In knowing anything one only directly knows the states of one's own consciousness, for knowledge is

the very nature of the soul. No one can possibly know another except by observing the effect of the presence of that other on his own consciousness. Hence, the soul only knows the outside things by means of the modification of its own conditions, called states of consciousness.

CHAPTER XIII

Every soul is an indivisible unit of Spirit, that is to say, an individual. If it were not indivisible, it would consist of two or more parts, which would be either similar or dissimilar. But not dissimilar, because two dissimilar things cannot exercise a common function. The parts must then be all made of the same substance. But this also cannot be true, for in that case each part would exercise similar functions, multiplying the operation of consciousness exactly as many times as there are parts in a soul. We should then expect to find not one impression of an object perceived, not one memory of a recalled experience, not one inference drawn from a given set of premises, nor even one act of desire, willing or judgment on the part of the soul, but a multiplicity of them, determinable by the number of parts of which

any particular soul were made. But this is contradicted by direct experience and observation. Therefore every soul is an indivisible unit of consciousness, *i. e.*, an individual.

The simplicity of the subject of inference is further established by the fact that no conclusion is possible in logic unless the major and minor premises are cognized by one and the same individual, for if the proposition, 'A=B,' be held in the mind by one man, and the premise, 'B=C,' by another, neither of them nor any one else can possibly draw an inference from them. If the soul were made up of parts, those parts would similarly cognize different portions of a syllogism, thus rendering it impossible to draw an inference. Therefore, the soul cannot be a thing made up of parts.

The fact that in perception a variety of what are known as psychical elements remain distinct and separate notwithstanding that the act of perception is a single affection or psychosis, shows that the elements of perception are but partial affections of a single individual. For as soon as the eye is opened it alights upon a thousand different objects which blend together in some way to produce a state of consciousness, namely, perception. Yet the blending is unique;

it is not the kind of blending which is met with in the realm of matter ; here the elements do not become *confused* or confounded together, and everything remains separate and distinct as before. It is a psychic fusion, the unity of conscious state arising from the unity of the conscious-substance itself. * This shows that the soul is a non-composite substance, that is to say an indivisible unit of spirit

The soul being an individual, or indivisible unit of consciousness, the idea of knowledge in reference to it is that of a state of consciousness which is neither the whole, nor a separated part of the life of the ego, but one of an infinity of interpenetrating and inseparable phases or aspects, each of which is pervaded by the all-pervading consciousness of the self. In different words, every soul is, by nature, an individual Idea which is itself the

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* *Cf* "We are compelled to admit that the so-called psychical elements are not independent entities, but are partial affections of a single substance or being, and since this is not any part of the brain, is not a material substance, but differs from all material substance in that, while it is unitary, it is yet present, or can act or be acted upon, at many points in space simultaneuosly . . We must regard it as an immaterial substance or being. And this being, thus necessarily postulated as the ground of the unity of individual consciousness, we may call the soul of the individual" (McDougall's Physiological Psychology, Temple Primer Series pp 78-79.)

summation of an infinity of different, but inseparable ideas, or states of consciousness. But since all these ideas or states of consciousness are not simultaneously present in the consciousness of each and every soul, some of them must necessarily exist in a sub-conscious or dormant condition whence they emerge above the level whenever conditions are favourable for their manifestation. Thus, knowledge is never acquired from without, but only actualized from within. This is so even when we perceive a new object or are impressed with a new idea for the first time, for the soul can directly never know anything other than the state or states of its own conciousness. Hence, unless the soul be endowed with the capacity to assume a state corresponding to the stimulus from without, it will never have the consciousness of the outside object. This capacity really means the power to vibrate in sympathy with, that is to say at the same rhythm* as the incoming stimulus. It is thus

*That an impression is in reality a kind of rhythm is clear from the nature of recollection which implies a revived impression. Memory, it will be seen, is not a picture gallery containing ready-made photos or reprints of past events, for the memory-images that arise in recollection are, in many instances, bigger than the perceiver thereof. This is especially the case with dreams which, at times, reproduce large cities, oceans and the like. It follows from this that recollections do not lie stored up in the form of ready-made images

evident that an impression in or on consciousness differs from a statue in marble in so far as it does not signify the chiselling off or removal of any part of its bulk, but resembles it inasmuch as it is brought into manifestation from within the soul's consciousness itself. Thus, while all impressions may be said to lie dormant in the soul, in the same manner as all kinds of statues remain unmanifested in a slab of stone, they cannot be described as being created in the same way. There is no question of carving out anything in the case of an impression in the soul-substance, but only of a 'waking up' of a dormant state, or a setting free of that which was previously held in bonds.

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in the body or brain, but are formed and projected there and then. But the only other thing that visual memory can be, if not a collection of ready made images, is the capacity to produce images, that is to say, the power to mould the material which enters into the composition of memory-images into characteristic shapes and forms. This means neither more nor less than the capacity to vibrate at different intensities or rhythm which by acting on a kind of very fine matter give rise to forms. The same is the case with respect to the recollection of impressions formed through the media of senses other than sight. They are not images in their inception, and cannot but exist in memory as so many different kinds of potencies or possibilities of recollection. It is these potencies of recollection which we have designated as different intensities of rhythm for the want of a more suitable term.

Hence, all kinds of impressions, or states of consciousness, lie latent in the soul, and only need the removal* of causes which prevent their coming into manifestation, to emerge from the sub-conscious state.

For the foregoing reasons sense-perception implies no more than the resonance of an already existing impress, or idea-rhythm, set free to vibrate in response to the incoming stimulus. It is this responsive resonance of its own rhythm, hence, a state of its own consciousness, which is felt by the soul at the moment of cognition. It should be stated that the soul has no other means of knowing its own states than feeling them, though the word feeling is here used in its widest sense, and includes sensations of touch, taste, smell, sight and hearing.

CHAPTER XIV.

The differences of knowledge among beings of different classes and kinds, as well as among

*It will be seen that impressions arise not only from perception, but also from the activity of thought, since whenever a new idea is formed as the result of perception or inference a new impression is 'discovered' to enrich the stock of one's knowledge.

individuals belonging to the same class are due to the operation of the Law of Karma, for the potentiality for infinite knowledge, that is omniscience, being the very nature of the soul, some outside influence is needed to prevent its becoming an actuality of experience. This external influence is the force of *ḳarmas*, as is fully explained in such works as the Gommatasara *

It follows from this that knowledge really arises from within, and education is merely a drawing forth (from *e*, out, and *duco* to lead) from the depths of consciousness. As the bondage of *ḳarma* is loosened, new impressions are set free to manifest themselves, widening the field of perception and knowledge by bringing the soul in touch with something to which it had remained irresponsive hitherto; and, finally, when all the perception and knowledge-obstructing bonds of *ḳarma* are destroyed, omniscience is attained by the potential becoming the actual.

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* The Gommatasara is a Jain work of great authority on the doctrine of karma, but unfortunately it has not yet been translated into English. Those who cannot have access to it are recommended to read the author's '*Key of Knowledge*' and 'The Practical Path' which deal with the main features of the subject at some length

CHAPTER XV.

Knowledge illumines itself as well as its object at the same time, that is to say that in knowing anything the soul also knows itself simultaneously. If the soul did not know its own existence, nobody else could ever impart knowledge to it, since instruction from without can never take the place of the feeling of awareness of one's own presence which is implied in self-knowledge. Besides, every one's experience will show that the one thing of which he is the most immediately and forcibly conscious is his own being.

Furthermore, every act of perception, and, in general, every kind of knowledge, implies the statement, 'I know it thus,' whether or not the state of consciousness expressed by the words be actually translated into thought, or word, or both. It is to be noted that unless appropriated by the soul, knowledge would be reduced to the condition of an image in glass which is not cognized by the thing in which it is reflected. If the soul were not an appropriative being, it, too, would resemble a looking glass, and would content itself by merely reflecting the image of the object before it; but it is obvious that it would have no knowledge in that case.

Further reflection would reveal the fact that the state of consciousness, 'I know it thus,' is not only necessary for knowledge to become the property of, or to be appropriated by the 'knower,' but would also be impossible unless consciousness illumined, that is to say knew, itself. Now, since every one's experience bears testimony to this state, it must be conceded that the soul knows itself as well as the object of knowledge simultaneously, that is at one and the same time.

On the scientific side of the question, too, it is evident that knowledge is a kind of feeling, or affection of the perceiver, and arises because the perceiving consciousness can feel its own states. But the states cannot be felt apart from the conscious substance itself, for a state of consciousness can only mean a modification of the perceiving consciousness itself. Hence, the modifications alone cannot be felt apart from the substance of consciousness, though the feeling of self-consciousness is usually pushed in the background of conscious illumination by the central place being reserved for the object of attention (knowledge).

In addition to illumination of the self and the object of knowledge, the process and the result, or

fruit of knowledge, also occur at the same time; for the functioning of consciousness is necessary for an act of cognition, and the acquisition of knowledge, resulting in the destruction of ignorance is a concomitant of such functioning.

CHAPTER XVI.

The determination of truth is independent of the senses, though the validity of knowledge at times immediately follows perception. This is proved by the fact that the senses are not opposed to ignorance, which is to be removed, and since that which is not opposed to ignorance cannot be the means of its destruction, it follows that they are not directly concerned in the acquisition of right or valid knowledge (*pramāṇa*). If sense-perception were the same thing as *pramāṇa*, the Sun and the Moon should be of the size actually perceived. But this is absurd. That the senses cannot possibly be regarded as giving birth to truth, *i.e.*, valid knowledge, is further evident from the fact that they are the causes of wrong knowledge also, *e.g.*, the illusory appearance of water in mirage. Besides, that which does not know itself can never know another, because only that which is appropriated by a knowing being is called knowledge, as

already explained. Hence, the senses not being appropriative—every one's experience and observation would bear this out—cannot give rise to *pramāṇa*. They are merely instrumental in the passage of stimulus from the external object to the soul within, which is the true knower.

In some cases it does undoubtedly seem that valid knowledge accompanies sense perception, but analysis will show this to happen only in cases of great familiarity with the object of knowledge, dispensing with the necessity for the ascertainment of truth, which is almost as good as already known.

We thus conclude that the senses do not give rise to *pramāna*, though they play no unimportant part in the process of perception.

CHAPTER XVII.

Pramāna is distinguishable from error by the fact that it cannot be falsified by any means, so that whatever can be shown to be false is not valid.

Pramāṇa arises in one of the two following ways, (1) in the case of familar objects immediately, and (2) in all other cases, upon further enquiry or experiment.

The same is the case with mental conviction, that is to say the consciousness of validity or certainty ; it also arises immediately and from within in the case of familiar objects, but on further investigation in all others.

CHAPTER XVIII.

Things in nature are characterised by many-sidedness. Each of them presents a number of aspects which have to be known before we can be said to have exact knowledge of their nature.

The different points of view for describing things are called *nayas* of which the *dravyārthika* (the natural) and the *paryāyārthika* (changing or conditional) are the most important.

The *dravyārthika* point of view only takes into consideration the nature of the substance or material of a thing, while the *paryāyārthika* confines itself to the study of the form or forms in which substances manifest themselves.

The importance of *anekāntic* (many-sided, hence all-embracing) knowledge lies in the fact that no one-sided system of study can possibly aim at perfect validity and fulness of knowledge, being debarred

from a general study of things from all sides by the very force of its one-sided absolutism ; for it frequently happens that the natural attributes of a thing are quite at variance with its manifested properties, so that if the attention of the student be confined to either of them exclusively, the resulting knowledge cannot but be imperfect, and, therefore, misleading also. *

CHAPTER XIX

Syādvāda is the system that sums up the results of enquiry from different points of view. It is the method of accurate predication and reconciliation. There are three simple predications or judgments : we either predicate existence of a thing, or its non-existence, or declare it to be indescribable. A thing is said to be indescribable when both existence and non-existence are to be predicated of it at one and the same time ; that is to say, from the same point of view.

By combining these three simple predications in different ways we get four compound judgments, making seven in all. These are as follows :—

* For a further description and elucidation of the subject see Appendix A.

1. Simple affirmation, *e.g.*, S is P.
2. Simple negation, *e.g.*, S is not P.
3. Simple indescribability, *e.g.*, S is indescribable (*i.e.*, both P and not P at once).
4. Affirmation *plus* negation.
5. Affirmation *plus* indescribability.
6. Negation *plus* indescribability.
7. Affirmation *plus* negation *plus* indescribability.

The seeming discrepancy between some of these predications is to be reconciled by a reference to the standpoints from which the conflicting statements are made. For instance, the three simple predicates about the soul may be :

1. it is immortal ;
2. it is mortal ; and
3. it is indescribable (*i e.*, at once both mortal and immortal.)

The apparent conflict here will disappear at once if we refer to the standpoints from which these predications have been made. We shall then have :

1. The soul is immortal as a simple substance (Spirit) ;
2. it is mortal when regarded as an embodied being;
3. it is indescribable as a reincarnating ego, which dies while living and lives when dead ! *

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* For a further discussion of the doctrine see Appendix D.

CHAPTER XX.

Pramāṇa is either *pratyakṣa* (direct) or *parokṣa* (indirect).

Pratyakṣa pramāṇa signifies direct perception. But *parokṣa pramāṇa* is dependent on memory, inference and the like. The one may be said to represent the intuitional side of life, and the other the intellectual.

Pratyakṣa pramāṇa may be defined as that form of pure, unclouded clarity of *Jñāna* which, being altogether beyond description, is essentially a matter for experience. The idea is that it is not possible to describe direct *pramāṇa* by means of words, but that every one knows from personal experience what is meant by the term.

Pratyakṣa pramāṇa is not to be taken as equivalent to pure, undetermined perception, which, not being antagonistic to doubt, wrong knowledge or ignorance, can never be termed *pramāṇa*. The argument that the *nirvikalpaka* (unascertained or undetermined perception) is the *pratyakṣa pramāṇa* because it is caused or produced by the object itself, lacks the support of both the *anvaya** and *vyatireka** tests, since valid

* The *anvaya* is the statement of the necessary logical connection between the *sādhya* (that which is to be proved) and the *sādhana* (that which is to prove the existence of the

knowledge of unperceived things is a matter of common experience. Besides, the knowledge of many of the states of consciousness, such as 'I am happy,' 'I am pleased,' and the like is obviously incapable of being produced by any object or objects, since there are no objects corresponding to happiness, pleasure and other similar ideas which might be perceived. It follows from this that *pramāna* cannot be said to be the product of objects.

Similarly, those who maintain that light is the cause of *pratyakṣa pramāna* are also ignorant of the nature of valid *jñāna* for *aloka* (light) is not even a cause of perception. If light were the cause of perception, it would be impossible to perceive its antithesis, *i.e.*, darkness, for darkness could not exist in light, and yet light would be required for its perception. The part which light plays in visual perception seems to be confined to the enlargement of the field of vision, though even this does not hold good in the case of all kinds of living beings, since

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sādhya) The *vyatireka* is the opposite of this, and implies the non-existence of *sādhana* in the absence of its *sādhya*. The following process of inference (syllogism) sufficiently illustrates both these types of arguments. There is fire (*sādhya*) in this hill, because there is smoke (*sādhana*) on it; for whereever there is smoke there is fire (*anvaya*); and whether there is no fire there is no smoke (*vyatireka*).

certain animals such as the owl can clearly perceive things in darkness. It is also evident that light plays no part whatsoever in the perception of objects with senses other than sight, and that dreams are also perceived without light. It follows from all this that light is not the real cause of *pratyakṣa pramāṇa* in any sense.

For similar reasons it is impossible to regard the sense-organs as the causes of *pratyakṣa pramāṇa*, for they are not endowed with consciousness and do not know themselves. Moreover, they can never reveal that which does not affect them immediately, *e.g.*, events of the past or future, or the deductions of reason. They are also limited to a certain range of vibrations, beyond which nothing can be perceived, for instance, no one has ever perceived an atom with the aid of his senses, though it is certain that atoms of matter exist in nature. We, therefore, conclude that the sense-organs also are not the causes of the direct type of *pramāna*.

It only remains to deal with the argument that *pratyakṣa pramāṇa* is caused by the contact between the sense-organs and the objects of knowledge, that is to say by the alightingof an organ of sensation on the object to be known. Here, too, it is obvious that the argument fails in the case of sight which 'perceives'

the branch of a tree near by simultaneously with the moon which is at a considerable distance. Now, because actual contact is not possible at one and the same time between the organ of sight and two such objects as the branch of a tree close at hand and the moon, it follows that actual physical contact between the sense-organs and their objects is not the cause of *pramāṇa*; and since what is not the cause of *pramāṇa* can never be the cause of *pratyakṣa pramāṇa*, it further follows that the theory under consideration is not founded on good reason. The absurdity of the position becomes perfectly clear the moment it is realised that there can be no contact between every object of knowledge and the sense-organs, and that knowledge is not had of every object that comes even in physical contact with an organ of sensation—the eye, the ear and the like.

CHAPTER XXI.

Pratyakṣa pramāṇa is of two kinds, *viz.*, *sāmvyavaharika* and *pāramārthika*.

The *sāmvaavahārika pratyaksa* is the kind of knowledge which is not characterised by full clarity. It is acquired with the aid of the senses and mind, and is also known as *mati-jñāna*.

The *pāramārthika pratyakṣa* signifies pure intuition, that is to say knowledge acquired without the aid of the senses and mind. This is also of two kinds, namely, *sakala* and *vikala*.

The *sakala pāramārthika pratyakṣa* means omniscience * pure and simple, implying full and all-embracing knowledge, unlimited by Time and Space.

The *vikala pāramārthika pratyakṣa* also signifies knowledge acquired independently of the senses and mind, but it is not unlimited like the *sakala*. It embraces two types of *jñāna* called *avadhi* and *manahparyaya*.

* Direct testimony as to the attainment of Omniscience on the part of great Teachers, is, of course not be expected from sources outside the circle of those who revere them as their Spiritual Ideals or Guides but it is interesting to note that Buddha was aware of the claim advanced by the Jainas of his time that their Tirthamkara, Bhagwan Mahavira, was endowed with Omniscience, that he was deeply impressed with the fact that Omniscience was attainable, and also that he devoted a considerable period of his life to its attainment, describing that wonderful faculty of all-embracing knowledge as "that separate and supreme vision of all-sufficing Aryan Knowledge, passing human ken"[1] Buddha, too, subsequently claimed to have attained to omniscience, but of this there is no acknowledgment from any non-Buddhistic source. According to Buddhist texts his illumination was discontinuous and dependent on reflection (Sacred Books of the East, Vol. xxxv, p 154), which is not the case with omniscience. In Appendix B we give the chain of indirect or inferential testimony based on Buddha's convictions and words, in so far as they have a bearing on the omniscient knowledge of the contemporary Jain Tirthamkara and Saints

Avadhi jñāna (clairvoyance*) is the *pāramārthika* or direct knowledge of material things within certain limits in respect of (i) *dravya* (substance), (ii) *kshetra* (place), (iii) *kāla* (time), and (iv) *bhāva* internal nature); and embraces a knowledge of some of the past and future lives of the soul.

Avadhi jñāna, it may be pointed out here, is to be distinguished from the false clairvoyance (*kuavadhi*) † which, though a kind of *pratyakṣa*, is not *pramāṇa*. *Manahparyaya jñāna* (telepathy)‡ means intuitional knowledge of material things in the minds of others within the same four kinds of limitations as specified in connection with *avadhi jñāna*, This is pure thought-reading, and is of two kinds, simple and complex.

The simple form of *manahparyaya jñāna*, technically known as *rijumati*, consists in the knowledge of simple

* The word clairvoyance, it should be noted, is hardly a suitable equivalent for *avadhi jñāna* which embraces a knowledge of some of the past lives of the soul, but in the absence of a more appropriate term we may as well employ it as such.

† The simple perusal of mos of the scriptures of the world will suffice to show that many an honest enthusiast has fallen a victim to this form of *ajñāna* (false clairvoyance), and, unable to distinguish the genuine thing from a baseless substitute, has been led to instal himself, in his mind, as a seer and prophet of a divinity which had no existence whatsoever outside his own imagination.

‡ The word telepathy is adopted subject to the observations made in respect of clairvoyance

impressions in the mind of another; the complex, called *vipulamati*, signifies a knowledge of all kinds of thoughts and impressions, whether simple or complex.

CHAPTER XXII.

Parokṣa pramāṇa signifies valid knowledge which is not characterised by the clarity of the *pratyakṣa*. Like the *pratyakṣa*, *parokṣa*, too, is to be known from personal experience, and cannot be described by means of words.

Some philosophers regard *parokṣa pramāna* as that form of knowledge which has the general,* as opposed to the particular, for its object. But this feature is also to be found in the *pratyakṣa*, which directly enables us to preceive the general, and cannot, therefore, be

* As a matter of fact, things in nature wear both the general and the particular aspects at the same time, so that there can be no general without the particular nor the particular without the general. When the special feature of a thing which distinguishes it from other things of the same description happens to be the object of attention, it is the particular, otherwise, that is to say, when emphasis is to be laid on the properties common to the whole class, it is the general that is the object of knowledge. Whoever has realised the impossibility of the general and the particular existing apart from each other will readily perceive that, like the two sides of a coin, they are the two concomitant, complemental and inseparable aspects which all concrete things wear in nature.

said to be a *lakṣana* (distinctive mark or feature) of *parokṣa pramāna* alone.

Parokṣa pramāṇa consists in the following five types * of knowledge :—

(1) *Smriti* (memory), or the recalling of that which is already known.

* Of the different kinds of *parokṣa pramāṇa*, *smriti*=perception recalled (see the Key of Knowledge by the present writer, chapter IX *pratyabhi jñāna*=*smriti*+perception ; *tarka*=*pratyabhi jñāna*+perception, and *anumāna*=*tarka*+perception

The case is quite clear so far as *smriti* and *pratabhyajñāna* are concerned, but with regard to the other two forms of *parokṣa pramāṇa* also reflection at once reveals the fact that it is the sight of smoke which occasions the formulation of the general rule that in all cases smoke only arises from fire. Suppose our major premise in a syllogism is: all crystals have planes of cleavage ; the point for determination is, how is this general proposition reached by the mind ? We shall let Herbert Spencer answer the question for us. "What", he asks, "induced me to think of all crystals ? Did the concept 'all crystals' come into my mind by a happy accident the moment before I was about to draw an inference respecting a particular crystal ? No one will assert such an absurdity. It must have been, then, that a consciousness of a particular crystal identified by me as such was antecedent to my conception of all crystals" (The Psychology of Reasoning, by Alfred Binet, p. 163). This amounts to saying that the perception of a particular crystal, has suggested the general proposition embodied in the major premise. Thus, *tarka* is really perception *plus pratyabhijñān*. The same argument suffices to show that *anumāna* arises only with reference to perception and the general logical proposition (*tarka*).

(2) *Pratyabhi jñāna* which arises from the combination of perception and memory, as in the state of consciousness implied in the statement: 'this is the man'. In this instance, the word 'this' connotes present perception, 'the' points to a recalled memory, and from their union arises the idea that the man now perceived is the same who was perceived before. *Pratyabhi jñāna* also includes such knowledge as arises from a comparison between a thing perceived and some other thing remembered. 'This is like that'; 'that is different from this'; and the like are instances of this kind of *pratyabhi jñāna.*

(3) *Tarka* or knowledge of the argument, that is of the invariable relationship, such as that of fire and smoke, between certain things. *Tarka* is the basis of inference, and relates to a rule of universal applicability to be deduced by induction from the observation of facts in nature, or otherwise.

(4) *Anumāna* † (inference), *i. e.*, knowledge of the existence or non-existence of a thing from the

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† That *anumāna* or logical inference is a very simple process and quite independent of technicalities and technical knowledge will be clear from Appendix C which incorporates the essential portion of "Logic For Boys and Girls", composed by the present writer. Appendices E and F will further suffice to demonstrate that it can be mastered in an incredibly short space of time.

knowledge of the relationship it bears to another thing, *e.g.*, the inference of the existence of fire at the sight of smoke.

(5) *Sruta jñana* which implies knowledge acquired by the interpretation of signs, symbols, words and the like. This form of knowledge depends on *mati jñāna* for its *data*, or raw material, and differs from it in respect of its extent, for while *mati jñāna* is confined to things existing within the range of the senses in the present, *sruta jñāna* may transcend these limits both in respect of Time and Space. Thus while an eclipse actually perceived with the senses is known by *mati jñāna*, the one now taking place in a far off country and the one which took place in the reign of Alexander the Great may be known by the *sruta*. The most important form of *sruta jñāna* is *āgama*, or the Scripture of Truth, *i.e.*, the word of a *Tirthamkara* (God). It is also called *sruti* on the ground of its having been heard from another, and is admitted as a form of *pramāna*, because it is the most reliable form of testimony, being the word of an Omniscient Being who is completely devoid of all forms of attachment and aversion, and who has, therefore, absolutely no motive or reason for deceiving or misleading anyone. The word of all other

persons is not *sruta*, but *ku-sruta* (false scripture), because it amounts to testimony which falls short of truth.

The characteristics of a true Scripture are:

(*i*) that it should embody the word of an omniscient Teacher;

(*ii*) that its teaching should be true to concrete nature, and not by way of a general discourse on certain abstract propositions of philosophy or on the metaphysical aspect of religion;

(*iii*) that it should speak out the precise truth without fear or favour; and

(*iv*) that its sense should be plain, and not concealed, so that it should not become the cause of misleading any one.

The special attributes of a true Teacher * are:

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* It may be pointed out here that no disembodied spirit, hence fully liberated Soul, can ever become a teacher, because a purely disembodied spirit is incapable of teaching for the want of a material body, the medium of communication with men. Hence, Scripture is the word of omniscient, deified men, preaching truth before the attainment of final emancipation as pure disembodied Spirit. This is tantamount to saying that it is not possible for an eternally and naturally free Supreme Being as some imagine their God or Gods to be, to be the author of the Scripture of Truth.

(*i*) that he should have evolved out omniscience which is a guarantee of fulness and perfection of knowledge,

(*ii*) that he should be absolutely devoid of all personal motives for love and hatred in any form,

(*iii*) that he should have completely conquered his lower nature, and

(*iv*) that he should have destroyed the bondage of the four kinds of his *ghātya* * *ḳarmas.*

CHAPTER XXIII.

Mati jñāna, to be distinguished from *ḳu-mati* (false *mati jñāna*), arises from the functioning of the senses and the mind, the former furnishing the raw material for thought and the latter converting it into ascertained truth.

Ku-mati includes all kinds of false and erroneous ideas and notions which may be entertained by thinking beings.

The first step in *mati jñāna* consists in *darsana* or pure sensing, that is in an undifferencing, detail-less cognition of the general features of a thing. This results in the acquisition of knowledge of the class to

* These are : (1) *jñānavaraniya*, (2) *darsanā varaniya*, *mohaniya* and *antarāya*. (See footnote on pages 49-52).

which the object belongs. Attention then comes into play, and engages itself in marking out the details and features of distinction of the object of enquiry, so that when analysis has furnished all the necessary or required particulars of a thing, the intellect sums up (synthesis) the result of the investigation and the culmination of thought, *i.e.*, the ascertainment of truth, is reached.

The following four stages occur between *darsana* (pure sensing) and the acquisition of *jñāna* (knowledge).

1. *Avagrha* which means the singling out of an object with reference to its class only, that is the knowledge of its general properties, *e.g.*, to know an object as a man.

2. *Ihā*, or the attitude of enquiry leading to the ascertainment of truth about the object of *avagrha*, for instance, to enquire whether the object known to be a man be a Londoner. *Ihā* must be distinguished from doubt which is not a form of *jñāna*.

3. *Avāya*, *i.e.*, the ascertainment of truth in respect of the subject of enquiry, as for instance, the determination that the man about whom it was asked, whether he was a Londoner or not, was in fact a Londoner.

4. *Dhāraṇā,* that is being impressed with the idea thus formed, so as to be able to recall it subsequently.

CHAPTER XXIV.

Omniscience includes a knowledge of all things that existed in the past, exist now or shall come into existence in the future.

It arises from the free functioning of the substance of consciousness, unhindered by the knowledge-obstructing influence of matter.*

* There can be no getting away from the fact that the soul can never know anything unless it be endowed with the knowing faculty. The senses only give us impressions, photos or images of objects, but not the knower to cognize them, and it would be a miracle if they could create the knower, for they are unconscious themselves There can be equally clearly no doubt but that the soul only perceives its own conditions or states of consciousness in knowing anything else, for very often that which it knows is very different from what is actually perceived, and in many cases what is known is never really perceived with the senses, e g., ether which is invisible to the naked eye. The existence of a capacity to know, then, is a condition precedent to the consciousness of the soul and it is evident that this capacity to know is not anything foreign to or acquired by the soul, but its very nature, for, as already observed, the separation of *jñāna* (consciousness) from the *jñāni* (knower) is fatal to both It is also evident that there can be no limit to the knowing capacity of the soul, for neither reason nor imagination are liable to be limited by aught but the

impossible, and though the senses of each and every living being do not embrace the whole range of phenomena, still there can be no doubt but that different beings take cognizance of different things, so that what is invisible to one soul does not necessarily remain unperceived by all. Owls, for instance, perceive objects in the dark; and it is obvious that the minute little insects which are quite invisible to us must be known at least to the members of their own fraternity, for they breed and multiply. The inference is that while the soul is the knower in its own right, its knowing capacity is obstructed, more or less, in the case of different beings, though consciousness with its special properties—individuality and knowledge—being common to all, there can be no differences of quality or quantity in respect of the potentiality of knowledge among them. This conclusion is fully supported by the facts or phenomena of clairvoyance and telepathy of the very existence of which men are almost wholly ignorant in this age, but which have been fully proved to be the natural functions of the soul (see the Proceedings of the Psychical Research Society.)

The nature of the soul being pure intelligence, thought (knowledge) or consciousness, the differences in the degree of its manifestation, among the different kinds of beings, as well as among members of the same species, must be due to the influence of some outside force, or agent, whose association or union with the conscious substance (soul) has the effect of depriving it of its pure clarity of knowledge. Unconscious matter is just such an agent, which as described in 'The Practical Path' enters into union with the soul-substance and thereby cripples its knowing powers, more or less, according to the type of bondage (the state of fusion of matter and soul). Thus, the differing types of consciousness depend on the operation of the knowledge-obstructing energies of karma, so that where they are actually in full play the manifestation of the knowing faculty of the soul may be reduced to the sense of touch, as in the case of one-sensed beings (metals and the like), while in

karmas sets the soul free to vibrate at its natural

the converse case, that is where they are totally eliminated, the full blaze of omniscience must be the reward of the conquering *jiva* (ego). All the intermediate degrees of manifestation of consciousness between these two extremes, it can be seen in a general way, also owe their existence to the destruction or quiescence, or partial destruction and partial quiescence of these energies of knowledge-obstructing karmas, for knowledge being the very nature of the soul may be covered over by the veil of ignorance and 'uncovered' as often as it may, but it cannot be acquired or developed anew, or engrafted on an originally unconscious stem. If we ponder over this statement, we shall not be long in realising that no originally unconscious substance can, by the centralisation, or mirroring of stimulus in a central part, convert it into sensation and itself into a knowing being The gulf between the conscious and the unconscious is too wide to be bridged over in this manner, and no intellectual jump or acrobatic feat of imagination can even faintly suggest the method by which or the manner in which such a miracle might be effected.

The soul, then, is the knower in consequence of its nature, the purity of which is defiled by the absorption of the unconscious substance—matter. It follows from this that the tearing asunder of the veils of matter, by destroying or checking the energy of karmas, which interfere with the knowing capacity of the soul, is the real means of increase of knowledge Observation shows that passions and emotions considerably interfere with one's knowing capacity and clarity of intellect; and the effect of bias or prejudice on the faculty of judgment is too well known to need comment Thus, our personal likes and dislikes as well as passions and emotions, are the causes which interfere with the dawn of *jñāna*. They cause the inflow of matter into the conscious substance, and the fusion of spirit and matter prevents the soul from exercising its natural function in full measure. Another cause of obstruction is the interest in the physical concerns of life which narrows down the zone of

rhythm *, and to exercise its function of unlimited knowing.

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knowledge to what is regarded as the immediately useful for the requirements of the physical body. Attention here acts as a porter at the gate, and admits only the desirable, thus shutting the door against all ideas other than those presenting themselves in response to the invitation of the desiring *manas* (lower mind, the seat of desires) We, therefore, conclude that the functioning of consciousness is obstructed by certain kinds of energies, springing into being from personal likes, dislikes, interests, passion, emotions and desires These energies have been classified under four different heads by the Jaina *ācharyas*, and constitute what are known as the *ghātiya karmas*.

* The rhythm, that is to say, the energy of functioning, of the soul, is of the most complex type, for it knows itself in addition to the object of knowledge at one and the same time, and also because its capacity to know things embraces the whole range of possibility, that which it can never know having no manner of claim to existence.

It follows from this that the natural energy of the soul, as pure spirit – a condition in which no interests or motives or other forms of obstruction remain to shorten the range of consciousness – is of the most complex type in which the rhythm of self-awareness holds together, in an interpenetrating manner, all other possible rhythms of knowledge none of which is denied freedom of functioning and operation As such, the soul resembles a great melody in which the rhythm of the tune hovers over the rhythms of the notes that enter into its composition, and in which each of the notes though a separate entity in itself, is nevertheless only an indivisible and inseparable part of the whole.

Now, since rhythm is but another word for an idea in connection with the soul, because knowledge consists in the states of one's own consciousness, by putting the above in the

CHAPTER XXV

A being can have from one to four different kinds of knowledge, but if he have only one, it must be *kevala jñāna* (omniscience); if two, *mati* and *sruta*; if three, *mati*, *sruta* and either *avadhi* (clairvoyance) or *manahparyaya* (telepathy); and if four, then all except the first named. The reason for this is that *mati* and *sruta jñānas* are enjoyed by all excepting those who have acquired omniscience. *Avadhi* and *manahparyaya* arise from the observance of rules of conduct laid down for the guidance of ascetics, so that those who acquire them enjoy them along with the other two (the *mati* and *sruta*).* *Kevala jñāna*, however, arises only when the soul completely withdraws its attention inwards, and, therefore, implies a cessation of the functioning of the outward-turned senses and intellect.

simple language of philosophy we may say that each perfect, or fully-evolved Soul, being pure consciousness freed from the blinding influence of matter, is actually an all-comprehensive Idea which sums up, as it were, and includes all other possible ideas without a single exception. Hence the fullest possible knowledge, unlimited by Time or Space, is always the state of consciousness of a deified soul. In other words, the emancipated soul is simply *jñāna mayee* (embodiment of knowledge), being pure consciousness in essence.

* *Avadhi jñāna*, according to the Scripture, is also enjoyed by great personages, such as *Tirthamkaras*, from their birth. In their case it arises as the result of the past good karmas of the soul.

Avadhi and *manahparyaya* being super-sensuous, that is independent of the senses and mind, are but limited forms of omniscience, and become merged in it when it arises.

CHAPTER XXVI.

Anumāna (inference) is of two kinds, *svārthānumāna* and *parārthānumāna*, the former implying an inference drawn for one's own satisfaction, or at one one's own instance, that is, by oneself, and the latter, one that is drawn at the instance of, or through the instrumentality of another.

Svārthānumāna (self-induced deduction) involves but little more than memory's work. It differs from *parārthānumana* (deduction at the instance of another) in so far as the latter implies a deliberative process of the mind, In *suārthānumāna* it is sufficient to know the logical relationship between certain objects (*e.g.*, smoke and fire), termed *sādhana* (mark) and *sādhya* (that of which the *sādhana* is a mark), respectively, and to allow the mind at the moment of inference to dwell upon the mark, when the *sādhya* will be recalled almost authomatically.*

* See "Logic Simplified" (Appendix E), reproduced from the Jaina Gazette for 1925

Both the *svārthānumānā* and the *parārthānumāna* proceed upon the one simple all-sufficing principle that logical inference only follows where there is a fixed rule, without a single exception, to govern the case ; *e.g.*, because smoke always proceeds from fire, therefore, whenever smoke is seen, the mind immediately goes back to the already familiar law (तर्क *tarka*) governing the relationship between smoke and fire. This is *svārthānumāna*. In *parārthānumāna* one's attention is called to the logical relationship which has to be accepted before a deduction can be drawn. Sometimes it may be necessary to put the matter in the form of a syllogism, and to explain it by means of an illustration, but that is only required in the case of very young pupils.

CHAPTER XXVII.

A *svārthānumāna* process consists of three parts, namely,

(*i*) a *sādhya*, *i.e.*, that which is to be proved,

(*ii*) a *sādhana*, or that which can exist only in relation with, and is, therefore, the determinant of the *sādhya*, and

(*iii*) a *dharmi*, that is the abode of the *sādhya*.

The *sādhya* also called *dharma*, with reference to its abode, the (*dharmi*), and the *dharmi* are sometimes taken together for the sake of brevity, and called *pakṣa*. In such a case there are only two limbs of the *svārthānumāna* syllogism, the *pakṣa* and *sādhana* or argument, also called *hetu*.

The *sādhya* may be defined as that which is *shakya* or *abādhita* (not opposed to or contradicted by direct perception or inference), *abhipreta* or *ishta* (which the disputant* wishes to establish) and *aprasiddha* or *asiddha* (which has not been ascertained as yet).

It will be seen that the insistence on the quality of *shakya* is intended to save fruitless speculation, while the confining of the investigation to an *aprasiddha sādhya* is calculated to prevent the re-opening of an already settled point.

The *sādhana* is a necessary part of a syllogism, because it is the mark of that which is to be proved,

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* The ancients employed the terms *vādi* and *prati-vādi* respectively for the theorist and the opponent who raises all sorts of objections against the validity of a proposition propounded by the *vadi*. The *prati-vādi* is an imaginary being whose sole *raison d etre* lies in the desire to establish the truth of a proposition by refuting all possible objections that can be raised against its validity. He is also useful as a nameless substitute for criticising a sensitive rival.

while the *dharmi* is required to localize the *sādhya*, for otherwise we might have smoke on a hill-top giving rise to an inference of the existence of fire in a lake, which would be absurd. The absence of a *dharmi* reduces *anumāna* to *tarka*, for in the absence of an abode, the inference only amounts to a repetition of the abstract relationship between the *sādhya* and the *sādhana* of a syllogism.

The *dharmi* may be either,

(1) *pramāna prasiddha*, *i.e.*, that which is known by *pramāṇa*,

(2) *vikalpa prasiddha*, which is taken for granted, or supposed, or

(3) *pramāna-vikalpa prasiddha*, *i.e.*, that which partakes of the nature of *pramāṇa* and *vikalpa* both.

Illustrations.

(*a*) This hill is full of fire, because it is full of smoke

(*b*) The horns of a hare are non-existent, because no one has ever seen them.

(*c*) Man is the master of his destiny, because he has the power to control his actions.

[Illustration (*a*) is an instance of the *pramaṇa prasiddha dharmi*, because 'this hill' (*dharmi*) is the immediate object of precepion.

The *dharmi* of illustration (*b*) is *vikalpa prasiddha*, because the 'horns of a hare' being purely imaginary,

can never be established by *pratyakṣa* or any other kind of *pramāṇa*.

The *dharmi* of the third illustration is *pramāṇavikalpa prasiddha*, because it (man) includes those who are the object of *pratyakṣa* as well as those that are *vikalpa prasiddha*.]

CHAPTER XXVIII.

Parārthānumāna means the knowledge of the *sādhya* from its *sādhana* arising in the mind* in consequence of the speech of another. It consists† of two parts, *pratijñā*, and *hetu*.

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* Some logicians hold the speaker's word itself to be the *parārthānumāna*, but this is not correct, for the speech of another may be the occasion for knowledge or inference, but is never so itself. The real basis of inference in *parārthānumāna*, as in *svārthānumāna*, is the logical connection (*vyāpti*) between the *sādhana* and its *sādhya*. Suppose we hear some one say : 'there is fire in this hill, because there is smoke on it. The statement fulfils all the requirements of a valid syllogism so far as the speaker himself is concerned, but it is obviously little or no better than verbal testimony for the hearer, for unless his own mind lend assent to the proposition, he cannot be said to have drawn an inference.

† It is said in Gautama's Nyaya *Darsana* that there are not two but five limbs of a syllogism of the *parārthānumāna* type, namely,

(1) *pratijñā*,
(2) *hetu*,
(3) *udāharana* (illustration),
(4) *upanaya*, (statement showing the presence of the *sādhana* in the *dharmi*), and
(5) *nigamana* (conclusion).

Pratijña means the proposition to be proved, and *hetu* is the statement of the logical connection, called *vyāpti*, advanced in proof thereof.

The following is an illustration of a five-limbed syllogism :

(*i*) This hill is full of fire (*pratijña*) ;
(*ii*) Because it is full of smoke (*hetu*) ;
(*iii*) Whatever is full of smoke is also full of fire, as a kitchen (*udāharana*),
(*iv*) So is this hill full of smoke (*upanaya*) ,
(*v*) Therefore, this hill is full of fire (*nigamana*).

Gautama, however, ignores the fact that *parārthānumāna* differs from *svārthānumāna* only in so far as it arises at the instance of another, so that the true basis of inference and the form of syllogism are identically the same in both the types of *anumāna*. Hence, the statement of *pakṣa*, called *pratijña* in a *parārthānumāna*, and *hetu* are alone needed in an inference at the instance of another. It is obvious that the true basis of *anumāna* is always the force of *vyāpti* (logical connection), so that the moment this relationship is asserted by mentioning the *sādhana*, smoke and the like, the mind is immediately led to that which is inseparably connected therewith, and discovers the *sādhya*

This operation is performed of one's own accord in *svārthānumāna*, but at the instance of another in the second kind of inference. In both cases, however, it is one's own mind that draws the inference, *upanaya* and *nigamana*, besides serving no useful purpose, are also objectionable as pure repetition of what is already stated in the *pratijña* and *hetu*; and *udāharana* would reduce logic to a child's play. For while it may be necessary to cite an actual instance of the *vyāpti* (logical connection) in a *veetrāgakathā* (lecture to a pupil), to enable little children to familiarize themselves with the basis of inference, it is bad rhetoric to do so in the course of a *vijigishu-kathā* (logical discussion) with a clever and presumably learned opponent. And, after all *udāharana* only tends to establish the validity of the *vyāpti*, and may be useful in showing the necessary relationship

Illustration.

There is fire in this hill (*pratijña*) because there is smoke on it (*hetu*)

CHAPTER XXIX.

There are two ways of stating the inseparable logical connection, affirmatively, called *anvaya*, as in the statement, 'wherever there is smoke there is fire'; or in the negative, known as *vyatireka*, *e. g.*, 'where there is no fire there is no smoke.'

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between the *sadhana* and its *sadhya*; it is of no real help in *anumana* which pre-supposes the knowledge of this relationship.

The modern syllogism of three steps, or propositions, as they are called, is also open to objection for similar reasons. It is the culmination of a highly elaborate system of ratiocination, it is true, but it is no less true that the system of which it is the outcome is not a natural but a highly artificial one. The practical value of modern logic, as a science, is to be judged from the fact that its inferential processes, though suitable, to a certain extent, for the purposes of the school-room, are never actually resorted to by men—not even by lawyers, philosophers and logicians—in their daily life, nor can they be carried out without first bending the current of thought from its natural channel, and forcing it into the artificial and rigid frame-work of an Aristotelian syllogism.*

The syllogism that answers the practical requirements of life and is natural to the rational mind, then, consists of two and only two steps—*pratijña* and *hetu*.

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* For a fuller discussion of the different systems of Logic, see Appendix E

A *hetu* of the first kind is called *upalabdhi*, and of the second, *anupalabdhi*.

The *upalabdhi* and *anupalabdhi hetus* are further sub-divided into two kinds each, the *bidhisādhaka* and the *nikheda-sādhaka*. The *bidhisādhaka* are those which prove the existence and the *nikheda-sādhaka* those that establish the non-existence of some fact.

Hetu may also be of a contradictory or of a non-contradictory type. The former, called *viruddhi*, implies the existence of a fact which is incompatible with the *sādhya*.

Illustration

There is no fire in this pitcher, because it is full of water.

The non-contradictory (*aviruddhi*) *hetu* is the argument which is not based on any fact incompatible with the existence of the *sādhya*,

Illustration.

There is fire in this hill, because there is smoke on it.

CHAPTER XXX.

The necessary logical connection, called *sādhyānyathānupatti*, *avinābhāva* or *vyāpti*, is the basis of inferential validity, for otherwise one might infer the existence of water at the sight of smoke. There are

the following five kinds of logical relationship between the *sādhana* and its *sādhya*:

(1) *Vyāpya-Vyāpaka* which is the relationship of part to the whole,

(2) *kārya-kārana*, *i.e.*, the causal connection,

(3) *purvachara-uttarachara*, that is antecedence and consequence,

(4) *sahachara*, or co-existence, and

(5) *svabhāva* which means peculiarity of nature, or identity.

Of these, the second and the third categories embrace two types each, because the relationship of cause and effect and of antecedence and consequence may be made to yield an inference relating to either the cause or its effect, or to antecedence or consequence, respectively. Thus, there are seven different kinds of logical relationship which give rise to a valid inference.

The following table will be found to combine the conclusions reached in this and the next preceding chapters, and to specify the different kinds of logical connection, with due regard to the classification of *hetu*.

- HETU
  - Anupalabdhi (Vyatireka).
    - Viruddhanopalabdhi (bidhi-sādhaka).
      - Svabhāva xxii.
      - Kārana xxi.
      - Kārya xx.
    - Aviruddhanopalabdhi (nikheda-sādhaka)
      - Sahachara xix
      - Uttarachara xviii
      - Purvachara xvii.
      - Kārana xvi
      - Kārya xv
      - Vyāpa-Vyāpaka xiv.
      - Svabhāva (nature or identity) xiii.
  - Upalabdhi (anvaya).
    - Viruddhopalabdhi (nikheda-sādhaka).
      - Sahachara xii
      - Uttarachara xi.
      - Puravachara x.
      - Kārana ix.
      - Kārya viii.
      - Vyāpya-Vyāpaka vii
    - Aviruddhopalabdhi (bidhi-sādhaka).
      - Sahachara (concomitance or co-existence) vi
      - Uttarachara (consequence) v.
      - Purvachara (antecedence) iv.
      - Kārana (cause) iii.
      - Kārya (effect) ii.
      - Vyāpya-Vyāpaka i.

Illustrations *

(*i*) Sound is subject to modification, because it is a product †

(*ii*) There is fire in this hill, because there is smoke on it

(*iii*) We shall have rain, because rain-clouds‡ are gathering.

(*iv*) It will be Sunday to-morrow, because it is Saturday to-day

(*v*) Yesterday was a Sunday, because it is Monday to-day

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* The numbering of these illustrations corresponds to the figures in the tabulated classification of *hetu*.

† Here sound falls in the larger category of products which is characterised by the quality of being subject to modification Therefore, being *vyāpya* (included) in the larger class (*vyāpaka*), it is liable to have the distinguishing feature of the whole class predicated of itself. When put in the form of a modern syllogism, this illustration would read

All products are liable to modification,

Sound is a product;

Therefore, sound is liable to modification

‡ Some logicians do not consider *kārana* (cause) to be a true *hetu*, on the ground that it is not always followed by its appropriate effect (*kārya*), but this is clearly wrong, since the true *kārana* always implies an active, potent (*sāmarthya*) cause which nothing can prevent from producing its effect. In the instance of rain-clouds, the absence of all those causes which prevent them from giving rain is presumed and implied The following is an instance which fully illustrates the force of *kārana* as a true *hetu*: 'there is shade in this place because we have an open umbrella (the cause of shade) here.'

(*vi*) This mango has a sweet taste, because it is ripe-yellow in colour.*

(*vii*) The temperature of this room is not cold, because fire (the antithesis of cold) is burning in it.

(*viii*) This person is not experiencing a feeling of cold because he is perspiring (which is the effect of the antithesis of cold).

(*ix*) Deva Datta is not happy, because he has present in him the causes of misery (the antithesis of happiness).

(*x*) To-morrow will not be a Sunday, because it is Friday to-day.

(*xi*) Yesterday was not a Friday, because it is Tuesday to-day.

(*xii*) This wall is not devoid of an out side, because it has an inside (*sahachara* of the outerside).†

(*xiii*) There is no jar in this room, because its *svabhāva* (identity) is not to be found (that is nothing resembling its identity is present) in it.

(*xiv*) There is no oak tree in this village, because there is no tree in it.

(*xv*) There are no (*sāmarthya*=potent) rain-clouds in this place because it is not raining here

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* This illustration proceeds on the principle of concomitance or co-existence of colour and taste, so that the presence of the one is an index to the existence of the other.

† Another instance of the principle of co-existence.

(*xvi*) There is no smoke in this place, because there is no fire in it.

(*xvii*) It will not be Sunday to-morrow, because it is not Saturday to-day

(*xviii*) It was not Monday yesterdary, because to-day is not Tuesday.

(*xix*) The right-hand pan of this pair of scales is not touching the beam, because the other one is on the same level with it

(*xx*) This animal is suffering from some disease, because it does not look healthy.

(*xxi*) This woman is feeling unhappy, because she has been forcibly separated from her lover

(*xxii*) All things are *anekāntic* (possessed of different aspects), because they do not enjoy absolutely one aspect alone

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CHAPTER XXXI.

Many-sidedness* is an important characteristic of *pramāṇa* (valid knowledge) because things in nature wear that aspect.

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* Obviously knowledge must correspond to nature to be valid, so that it should know things as they actually exist. The form in which things exist is *dravya-paryāya-rupa* (*dravya*=substance, *paryāya*=condition or form, and *rupa*=aspect) from one point of view, *nitya-anitya* (*nitya*=eternal and *anitya*=transient) from a second, *sāmānya-vishesa* (*sāmānya*=general and *vishesa*=particular) from a third,

The immediate fruit or effect of *pramāna* is the removal of ignorance ; indirectly, it enables one to adopt that which is good and to avoid the harmful. *Pramāṇa* ultimately leads to *mokṣa* (nirvāna) the goal of Perfection and Deification.

CHAPTER XXXII.

According to Buddhist logicians, the true *hetu* should possess the following three characteristics:—

(*i*) it should be present in the *pakṣa*,

(*ii*) it should also exist in the *sapakṣa*, and

(*iii*) it should not be found in the *vipakṣa*.

The *pakṣa* has already been explained to mean the *sādhya* and its abode, the *dharmi* ; but *sapakṣa* is

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and so on A gold ring, for instance, is neither a substance (gold) nor a form or condition ('ringness') alone , it is gold in the form of a ring. This is what is meant by the *dravya-paryāya-rupa*, for no substance can possibly exist without a form. Similarly, everything is *nitya-anitya*, for while incessant changes of form follow one another, on the one hand, no change whatsoever takes place in the material basis of those changes themselves, on the other The same is the case with the *sāmānya-vishesa* nature of things, each of which belongs to a class and 's yet distinct from all other members of its species. It thus exhibits qualities which are common to the whole class together with those special features of its own which are not to be found in any other member of that class. This amounts to saying that neither the absolutely general nor the absolutely particular can ever exist by itself in nature.

the place where the *sādhana* and the *sādhya* are known to abide in some already familiar instance, while *vipakṣa* embraces all other places where the very possibility of the existence of the *sādhya* is counter-indicated.

Illustration

This hill (*pakṣa*) is full of fire,

Because it is full of smoke,

Whatever is full of smoke is full of fire, as a kitchen (*sapakṣa*).

Whatever is not full of fire is also not full of smoke, as a pond (*vipakṣa*)

The Naiyayakas* add two more characteristics or conditions to the above-mentioned three of the Buddhist *hetu*, making them five in all. These additional conditions are :

(iv) it should not establish the opposite of the *sādhya* by any forcible or necessary implication, and

(v) it should not leave the matter in doubt by equally forcibly suggesting the existence of the opposite of that which is to be proved.

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* The Naiyayakas are the followers of the Nyaya school of philosophy founded by Gautama.

The distinction between these two conditions lies in the fact that while the former actually proves the existence of the opposite of that which was to be proved, the latter simply leaves the matter in doubt by affirming the existence of both, the *sādhya* and its opposite, with an equal degree of logical force.

Both these views are, however, erroneous, for neither the first three nor all the five features, as enumerated by the Naiyayakas, constitute the true characteristics of a *hetu*, the distinguishing feature of which is the *unvarying and the universally true connection between the sādhana and its sādhya.*

It is possible for a given *hetu* to exhibit all the five attributes insisted on above and yet to be no true *hetu* at all.

Illustrations.

1 It will be Sunday to-morrow, because it is Saturday to-day

[Here to-morrow is the *pakṣa*, Sunday the *sadhya*, and Saturday the *hetu*. Hence, if the argument of the Buddhists and the Naiyayakas were correct, and the *hetu* did reside in the *pakṣa*, we should have Saturday residing in to-morrow, which would be absurd.]

2. The unborn child of Z will be of a dark complexion like the other children of Z who are (all) dark-complexioned, because he will be a child of Z.

[By analysing this example, we get :

(i) *pakṣa*=the unborn child of Z.

(ii) *sapakṣa*=the existing children of Z.

(iii) *vipakṣa*=children of others.

(iv) *sādhya*=having a dark complexion, and

(v) *hetu*=the quality of being Z's child

Here it is obvious that although the *hetu* resides in the *pakṣa* and the *sapakṣa* and is not to be found in the *vipakṣa*, thus fulfilling the three requirements laid down by Buddhist logicians, it is none the less no true *hetu*, since there is no necessary connection between the unborn child of Z and a dark complexion, it not being the order of nature that whoever is a child of Z must be dark-complexioned.

The same considerations apply to the view of the Naiyayakas, *because the *hetu* (the quality of being a child of Z) also proves neither the existence nor the co existence of the opposite of the *sādhya* (dark complexion.) Thus the illustration furnishes all the five requisites of a Naiyayaka *hetu* and yet the conclusion arrived at sufficiently demonstrates its invalidity.]

* The reader should be on his guard against confounding the true *vyāpti* with what the fallacy of the Erratic Reason of the Naiyayakas is intended to safeguard with reference to logical inference. The latter does not aim, in any sense, to secure the establishment of an universally true inferential connection between the argument and what is sought to be proved with it ; on the contrary, it exhausts itself the moment the past is ascertained to contain nothing to controvert the argument.

In the illustration chosen, the fact that all the children of Z are of a dark complexion satisfies the requirements of the Naiyayaka *hetu* because we cannot point to an individual who might have a fair complexion and yet be a child of Z.

It should be further observed that the *sapakṣa* and the *vipakṣa* are not to be found in each and every argument.

Illustrations.

1. Things invisible to us are perceivable by some one, because they are proved by inference; whatever is proved by inference is also perceived by some one, as fire, etc.

[Here 'things invisible to us' is the *pakṣa* and 'fire, etc.' the *sapakṣa*, but there is no *vipakṣa*, for these two, that is the *pakṣa* and the *sapakṣa*, exhaust all objects.]

2. A living organism is characterised by the presence of the soul, because it breathes, whatever is not characterised by the presence of the soul does not breathe, as a clod of earth.

[This is an opposite case to that in the preceding illustration, as there can be no *sapakṣa* here, for all things are either living organisms (*pakṣa*) or not characterised by the presence of the soul (*vipakṣa*), the clod of earth being not an illustration of *sapakṣa* (where the *sādhya* and *sādhana* are to be found together) but only a form of *vyatireka vipakṣa*.]

No inference as to the complexion of the unborn child can, however, be drawn, since there is no true logical connection between the fatherhood of Z and the dark complexion of his children. It is interesting to note here that Nyaya defines Reason in the following significant words. "The reason is the means for establishing what is to be established *through the homogeneous or affirmative character of the example.*" (The Nyaya Sutra by S. C. Vidyabhushan, p. 11). The *italics* are ours, but they suffice to show that the Naiyayaka conception of Reason did not aspire at establishing any such thing as a true vyāpti for its inferential processes, which are grounded on nothing more reliable than the force of a homogeneous *example*.

Where the *hetu* does not admit of a *vipakṣa* it is called *kevalānvayi* (purely *anvaya* in form); where it precludes the possibility of the *sapakṣa*, it is termed *kevala* (purely) *vyatireki*; and in all other cases, that is where it takes both the *anvaya* and the *vyatireka* forms, it is known as *anvaya-vyatireki*.

CHAPTER XXXIII.

Abhāsa (fallacy) is a falsehood which has the appearance of truth. There are many kinds of fallacy —one corresponding to every limb, or part, of *pramāna*. The important ones of these will alone be described here.

Pramānābhāsa includes all those forms of ignorance—doubt, error and the like—which are characteristic of untruth.

Tarkābhāsa is the setting up of an inseparable connection between objects which are independent of each other, *e.g.*, 'wherever there is smoke, there is lime.'

Pakṣābhāsa is the fallacy of proposition, and arises in the following cases:—

(*a*) When an unproved proposition is taken as proved, *e.g.*, 'there is a maker of the universe.'

(*b*) When the statement made is incapable ot being proved, *e.g.*, 'everything is perishable.'

(*c*) When it is opposed to truth as established by direct perception, *e.g.*, 'things are not characterised by many-sidedness.'

(*d*) When it involves a construction which is opposed to the accepted sense of words, *e.g.*, taking a sister to mean a wife.

(*e*) When it contradicts *anumāna*, *e.g.*, 'there is no omniscient being.'

(*f*) When it is fatal to its own validity, *e.g.*, 'nothing exists.'

Hetvābhāsa is the fallacy of *hetu* (reason), and is of four kinds.

(1) *Asiddha hetvābhāsa* which is either

(*i*) *sarupāsidha*, whose faleshood is a matter of certainty, as in the instance, 'sound is perishable because it can be seen with the eye'; or

(*ii*) *Sandigdhāsiddha* which implies an uncertainty about the existence of the *sādhana*. It will be seen that where the very existence of the *sādhana* be involved in doubt, validity of inference cannot be guaranteed, as for

instance where it is uncertain whether what is seen be smoke or only vapour, no valid inference can be drawn about the existence of fire in the *pakṣa*.

(2) *Viruddha hetvābhāsa* which is inseparably connected not with the *sādhya*, but with its antithesis. An instance of this is: 'sound is eternal, because it is an effect.' Here obviously the quality of being an effect is connected with perishability, since effects are always compound, and are, sooner or later, dissolved into their elements.

(3) *Anaikāntika hetvābhāsa* occurs when the *hetu* is to be found in all the three, the *pakṣa*, *sapakṣa* and *vipakṣa*.

The effect of the presence of the *hetu* in the *vipakṣa* is to rob the conclusion of that logical validity which *anumāna* directly aims at.

The *anaikāntika hetvābhāsa* is of two kinds, (1) the *nischita vipakṣa vritti* where it is certain that the *hetu* resides in the *vipakṣa*, and (2) the *shankita vipakṣa vritti* where the matter is involved in doubt.

Illustration.

(1) Sound is perishable, because it is knowable.

[This is an instance of the *niṣchita vipakṣa vritti* type, because it is certain that the quality of knowability resides not

only in perishable things, but also in those that are imperishable, *e g.*, space, souls and the like.]

(*ii*) Watches are fragile, because they are manufactured with machinery.

[This is an instance of the *shankita vipakṣa vritti type*. The fallacy in this case lies in the fact that it is not certain whether the quality of being manufactured with machinery does not reside in things which are not fragile, *i.e.*, the *vipakṣa*.]

(4) *Akinchitkara hetvābhāsa* is the fallacy of redundancy. This is also of two kinds:

(*a*) The *siddhasādhana* which means the establishing of that which has already been proved by some other kind of *pramāna.*

Illustration.

Sound is heard by the ear, because it is sound.

(*b*) The *badhita viṣaya* which relates to a proposition inconsistent with the *pratyakṣa pramāna* direct observation, *or jñāna*), logical inference, scriptural text or its own sense.

Illustrations.

(*i*) Fire is not endowed with warmth, because it is not a substance (inconsistent with *pratyakṣa*).

(*ii*) Sound is unchanging, because it is not an effect (inconsistent with *anumāna.*)

(iii) *Dharma* (virtue or righteousness) is the cause of pain, because it resides in man. (Inconsistent with Scripture according to which *dharma* is the cause of happiness)

(iv) Z is the son of a barren woman, because she has never conceived (inconsistent with the proposition itself).

Dṛṣṭāntābhāsa occurs when a *dṛṣṭānta* is not an appropriate illustration. This is of two kinds :—

(i) *Sādharmya* or *anvaya dṛṣṭāntābhāsa*, and

(ii) *Vaidharmya* or *vyatireka dṛṣṭāntābhāsa*.

The *Sādharmya* fallacy arises when a negative illustration is given in place of an affirmative one.

Illustration

There is no *sarvajña* (omniscient being), because he is not apprehended by the senses, like a jar

[The illustration should have been of something not perceivable with the senses.]

The *vaidharmya* is the opposite of the *sadharmya*.

Illustration.

Kapila is omniscient, because he is beset with desires, like the *arhanta* (Tirthamkara)

[Here the example of the *Arhanta* who is absolutely desireless is opposed to the argument advanced.]

Every illustration has reference to either the *sadhya*, or *sādhana*, or both. This gives us three

forms of the *anvaya*, and three of the *vyatireka drstāntābhāsa.*

Illustrations.

(i) Word is *apauruseya* (unproduced by man), because it is devoid of sensible qualities; whatever is devoid of sensible qualities is *apauruseya*, like

(*a*) sensual pleasure,

(*b*) matter, or

(*c*) a jar.

[Here (*a*) is chosen as an instance of the wrong illustration of the *sādhya* (because sensual pleasure is the opposite of *apauruseya*), (*b*) of the *sādhana* (matter is not devoid of sensible qualities), and (*c*) of both the *sādhya* and *sādhana* (for a jar is neither *apauruseya* nor devoid of sensible qualities.) These are instances of the *anvaya drstantantābhāsa*]

(ii) Word is *apauruseya*, because it is *amurtika* (devoid of sensible qualities), whatever is not *apauruseya* is not *amurtika*, as

(*a*) an atom,

(*b*) sense-gratification, or

(*c*) Space.

[This is a threefold illustration of the *vyatireka drstāntābhāsa*. The atom, being *apauruseya*, does not furnish an instance of the not-*apauruṣeya* quality; sense-gratification is not non-*amurtika*, and space is neither not-*apauruseya* nor not-*amurtika*.]

Anvaya dṛṣṭāntabhāsa also occurs where the order of the *sādhya* and the *sādhana* is reversed in the exemplification of the *hetu.*

Illustration

There is fire in this hill,
Because there is smoke on it,
Wherever there is fire there is smoke (*anvaya dṛṣṭānta-bhāsa.*)

[The true form of the *anvaya* exemplification here should be. 'wherever there is smoke there is fire.]

Similarly, *vyatireka dṛṣṭāntābhāsa* also occurs when the *sādhya* and the *sādhana* replace each other in *vyatireka* exemplification.

Illustration.

This hill is full of smoke,
Because it is full of fire;
Whatever is not full of smoke is also not full of fire.

[The fallacy is obvious, for there may be fire without smoke.]

Bālaprayogābhāsa (*bāla*- pertaining to children, *prayoga*=practice, and *ābhāsa*=fallacy) consists in not mentioning all the necessary limbs—proposition, *hetu*, *udāharaṇa*, *upanaya* and *nigamana* (see footnote to p. 59 *ante*)—of a school-room syllogism. This fallacy also occurs when these limbs are given in a wrong order.

Sankhyābhāsa is a fallacy in reference to the sources of *pramāṇa* (valid knowledge) which are

(i) *pratyakṣa* (direct knowledge),

(ii) *anumana* (inference), and

(iii) *āgama* (Scripture).

This kind of fallacy consists in denying any or all of these three sources, because while *pratyakṣa* is the immediate destroyer of doubt and ignorance, the validity of logical inference cannot be ignored, and testimony, provided it be the word of a qualified observer and absolutely unimpeachable, is certainly the only source of knowledge of things beyond perception and inference both. The leaving out of certain forms of knowledge, e. g., memory, is another instance of this fallacy.

Agamābhāsa is that form of fallacy which consists in regarding the word of an unqualified teacher as the Scripture of truth. This fallacy also occurs when the true Scripture is misquoted to support a false proposition.

APPENDIX A.

NAYA VADA.

THE philosophy of *Nayas* (standpoints) is an integral part of Jaina Metaphysics, and Jaina philosophers have always laid the greatest emphasis on its comprehension. It is maintained that no one who is not fully acquainted with this department of thought is likely to make any real progress in the acquisition of truth, however much he might make himself familiar with other matters. To estimate the true value of this statement it is necessary to determine the nature of knowledge itself, in the first instance.

The object of knowledge is to make us acquainted with the nature of things, so that when we know a thing fully we are said to have knowledge of it. Now, knowledge arises in one of the two following ways : (1) it is either perceived directly, or (2) is inferred from facts of observation or record. The first kind, called *Pratyakṣa*, includes the *kevalajnana* (Omniscience) of the *Siddhātman*[1], the *Manahaparayaya*[2] and *Avadhi*[3], of the *Muni*[4], and the sense-perception

1 A Perfect or Deified Soul
2 Knowledge of the thoughts of others
3. A kind of telepathy
4. A Jaina Saint.

of the ordinary living beings in the world. The second category comprises what has been called the indirect, or mediate, knowledge. Leaving aside the first class of knowledge with which we have no concern in the present work, we notice that the indirect, or mediate, knowledge itself is of two kinds, namely, (1) that which is heard from others, and (2) that which is intellectually inferred. It is in respect of these two kinds of non-immediate knowledge that the greatest care is to be observed in accepting the statements of others or the deductions of our own reason.

A number of tests have been laid down by the wise for the purpose of testing the accuracy of both these kinds of indirect knowledge. One of these tests, and the one with which we are mostly concerned at present, is the relativity of knowledge. Obviously, everything exists in relation to a number of other things, and is liable to be influenced by them. Hence, knowledge to be complete must describe its object with reference to its relations with other things.

Similarly, when things are described by men they are described invariably from some particular point of view, though some people are led to imagine this one-sided description to be exhaustive. This kind of knowledge may be true from the particular point of

view from which it is arrived at; it is certainly not true from any other.

It is thus obvious that no statement of a fact or piece of information, or scriptural text, can be relied upon to impart full knowledge of a thing, unless it is comprehensive enough to embrace the various descriptions thereof obtained from the different points of view. Jainism, therefore, warns us against falling a victim to imperfect information and being misled by it. Hence the importance which is attached to the philosophy of standpoints by the Jaina Metaphysicians.

The oft-quoted parable of the blindmen and the elephant is admissible here to illustrate the point under consideration. Each of these persons, desirous of knowing what an elephant was like, touched and felt a separate part of its body, and went home pleased with the information thus derived concerning its form. They then sat down to compare notes, and soon discovered that there was no agreement among them as to the form of the animal. The man who had only touched its leg described it as a huge column, the one who had felt the ear, as a winnowing fan, and so forth. They soon came to words and then to blows; and still no one was willing to admit that he was in the wrong. At last there appeared another man on the scene who was not blind, and he was with

difficulty able to pacify them and settle their disputes by convincing them of their partial knowledge!

The lesson to be learnt from this instructive parable is that unless all the different aspects of a thing have been enquired into and studied, the partial knowledge based on any one aspect alone is liable to lead us into error and conflict with others.

All the confusion of thought which is prevailing in the world is thus the outcome of inexhaustive research, and of the acceptance of a part for the whole. A single instance would suffice to satisfy the reader that most, even if not all, of our disputes only betray the pig-headedness of the blindmen of the parable in ourselves. For a long time past a keen controversy has been raging among philosophers as to the nature of the will, some holding that it is free, others denying it. As a matter of fact, both parties are right, but only from their respective standpoints. If we approach the question from the point of view of the nature of will, that is to say, in respect of its natural qualities, we must, with Bergson, arrive at the conclusion that it is free, but if we look at it as regards its manifesed appearance, that is to say, from the point of view of 'evolution,' it is certainly subject to predeterminism of *karmas* (actions). It is thus to

clear that both the parties to the controversy have only got hold of partial truth, and are trying to pass it off for absolute wisdom. The truth is neither in the view of the one nor in that of the other, but in a perfect synthesis of both, since will is free by nature, but liable to predeterminism of *karmas*, as an incarnating ego.

It is thus evident that the greatest care must be taken in accepting all one-sided statements of facts, whether they come from gods or men. It must be remembered that our language makes it impossible for us to describe things in all their aspects at one and the same time, and, for that reason, is liable to lead us into error to a considerable extent. He who would avoid falling into the pitfalls of error must, therefore, first of all, try to understand and master the philosophy of *Nayas*.

Jainism aims, from the very commencement, at a systematic classification of the subject-matter of knowledge, and divides the philosophical standpoint into two main heads, the *Nishchaya* and the *Vyavahāra*. Of these, the former deals with the natural qualities, hence the essential nature of things which remains true under all circumstances conditions and states. For this reason, it is called the *Nishchaya*, *i. e.*, the natural, certain or exact. The latter, that is

the *vyahavāra*, however, deals with things not with reference to their real or essential nature, but only with respect to their utility, or their shifting states and conditions. The statement 'This is a jar of clay' is an illustration of the *Nihschaya Naya*, while 'This is a jar of butter,' is true only from the *Vyavahāra*, or the practical, point of view.

Nishchaya naya is again divided into *shuddha* (true) *nishchaya* and *ashuddha* (*a*, not, and *shuddha* true) *nishchayanayas*. The former only speaks of the attributes and qualities of pure spirits or souls; but the latter concerns itself with the nature and functions of the impure ego.

According to another mode of classification, *nishchaya naya* is divided into two kinds, namely, (1) the *dravyārthik* and (2) the *paryayārthik*. The former of these is the substantive point of view, since it describes things with reference to their general qualities and substances. The latter is the standpoint of change, and gives prominence to forms or conditions, which souls and matter assume from time to time, in the course of 'evolution.' From the *dravyārthik* point of view, it is correct to say that souls are all alike, since they are made of the same substance and have the same nature, but from that of the *paryayārthik naya* they differ in respect of their special

qualities, which they have evolved out in the course of transmigration.

The *Dravyārthik Naya* is further sub-divided into three classes, *Naigama*, *Samgraha*, and *Vyavahāra*.* The *Paryayāyrthik* is also sub-divided into *Rijusutra*, *Sabda*, *Samabhirudha*, and *Evambhuta*. According to some *achāryas* (philosophers), the *Rijusutra* is to be treated as a sub-division of the *Dravyārthik Naya*, but this is only a matter of classification, and has no bearing on the general aspect of the subject.

It is not to be supposed that there are only seven *nayas* or standpoints there are many subdivisions, and, according to certain writers, their number is seven hundred. But as the principal ones are the seven described here, it would serve no useful purpose to enumerate the others.

We may now proceed to consider these seven principal *nayas* separately.

(1) *Naigama*, from *na*, not, *eko*, one, and *gama*, certainty, hence the non-distinguished, is the point

* The word *vyavahara* in this classification is to be distinguished from the same term as mentioned in connection with the earlier classification of *nayas* into two general classes, the *nihschaya* and the *vyavahara*. There its significance is that of the practical or vulgar, while here it means the particular or concrete

of view of abstraction. When people talk of things in the abstract they speak from the *Naigama* point of view. Yet it will be a mistake to imagine that abstractions can actually exist in nature apart from concrete objects and things. The general and the particular are found to be existing in nature together, never separately. For instance, we cannot imagine fluidity existing apart from a fluid, or goodness, apart from some other who is good. Whoever has lost sight of this peculiar aspect of nature has directly come to grief in his metaphysical aspirations. Nevertheless it is impossible to avoid talking of things in the abstract.

Naigama naya also signifies the description of a fact or event with reference to a past or present or future occurrence or fact. 'Today is the day of Bhagwan Mahavira's nirvana'—is a statement of a fact with respect to an event in the past, that is to say, the nirvana of the *Tirthamkara* which rook place over 2,450 years ago. When a man who is merely cleaning or washing rice preparatory to their cooking says, that he is preparing his meal, the answer is made with reference to the culmination of a process which is going on in the present. To talk of a prince as a king is the mode of working of the *naigama naya* with reference to a future event.

(2) *Samgraha* is the description of a thing from the standpoint of its class. It is the standpoint of the genus. For instance, when the word *jīva* (soul) is uttered, it refers to all kinds of *jīvas*, without discrimination in respect of type, form, etc. etc. Samgraha Naya is of two kinds, namely, Para Samgraha or the ultimate class-view, and the Apara Samgraha, which is the inferior class-view. The terms genus and species would seem to correspond to these two classes of the Samgraha Naya.

(3) *Vyavahāra*, or the particular, is the point of view which describe concrete individuals.

The feature of distinction between the *Samgraha* and the *Vyavahāra* lies in the fact that while the former takes into consideration only the attributes or qualities of a class, the latter deals with the peculiarities and attributes of individuals. The *Samgraha* is the standpoint of the concrete general (*genus*) but the *Vyavahāra* that of the concrete particular (individual).

(4) *Rijusūtra* is the standpoint which only takes into account the present form of a thing, without reference to its past or future states. Here the speaker confines his observations to the present condition of the thing he describes, without troubling himself as to its past and future possibilities or aspects. The *Rijusūtra* recognises nothing but the thing itself

as it appears at the moment, and has no concern with its origin, or end, or with the causes which brought it into existence. The philosophers of the Buddhist school attached great importance to this point of view, and maintained that one ought to consider things only as they appeared at the moment of perception.

(5) *Shabda*, or the verbal standpoint, observes the distinction of gender, number, case, tense, etc., in synonymous words. For instance, the words *dārā*, *bhāryā* and *ḳalatra* differ in their grammatical gender, though they all signify wife. We may, therefore, say that *Shabda Naya* is the standpoint of the grammarian who distinguishes between the meaning of words on the ground of gender, number, etc. It would be a fallacy of this *Naya* to regard such words as referring to different objects, because of their verbal or grammatical distinctions.

(6) *Samabhirudha Naya* distinguishes between words on etymological grounds. For instance, the words *Indra*, *Shaḳra* and *Purandara*, though of the same gender and all applicable to the rulers of the Heaven-worlds, differ in meaning from one another, *Shaḳra* signifying the strong, *Indra*, the possessor of many divine powers, and *Purandara*, the destroyer of the cities of the enemy. The difference between the *Shabda* and the *Samabhirudha Nayas* seems to lie

in the fact that while the former is the standpoint of a grammarian, the latter is that of an etymologist who traces words to their roots.

(7) *Evambhūta Naya* is that mode of comprehending objects which takes into account their special functions, and describes them by such words as are justified by their activities. For instance, we call a person *pujari* (worshipper) because of his being engaged in the performance of *puja* (worship). Similarly, a strong man may be called *Shakra*, and he who is engaged in the act of destroying the cities of his enemies, Purandara. This particular *Naya* is in much use in common parlance.

As the fallacies of these different kinds of *nayas* throw considerable light on the nature of the *nayas* themselves, they may also be mentioned here. There are the following seven fallacies, corresponding to the seven *Nayas*:—

(1) *Naigamābhāsa* is the fallacy of the *Naigama Naya*, and consists in making a separation between the abstract and concrete aspects of things, e. g., to speak of the existence and consciousness of soul as if they could be separated from one another.

(2) *Samgrahabhāsa*, the fallacy of the *Samgraha Naya*, occurs when we adhere to the class and reject

the individual. For the class alone can never exist by itself, that is to say, apart from the individuals composing it. Whenever this fallacy has crept into a system of philosophy, the harvest of the scholar has been a whirlwind of meaningless terms, instead of a knowledge of things as they exist in nature. The Absolute of monism is an error of this kind, so is the Platonic notion of Archetypal ideas.

(3) *Vyavahārābhāsa* lies in refusing to recognise the general qualities as existing along with the special attributes of concrete things. The Charvaka philosophers fell into this kind of error, and confined their system to what could be revealed by the senses alone.

(4) *Rijusūtrābhāsa* occurs when permanency, hence reality, of things is altogether denied, as is the case with the Buddhistic philosophy which propounds the theory of *shunyavāda* (emptiness).

(5) *Shābdābhāsa*, the verbal fallacy, arises when we ignore the underlying purport of words, and lose ourselves in empty grammatical distinctions.

(6) *Samabhirudhābhāsa*, consists in attaching undue importance to derivative significancy of words, and in treating such words as Indra, Sakra and Purandara as if they did not refer to the same personage. This

kind of fallacy would also seem to occur if allegorical characters be taken to be real gods and goddesses and historical figures.

(7) *Evambhūtābhāsa* lies in making the existence of a thing dependent on the performance of the special function with reference to which it has been given a particular name, e. g., to treat a *pujari* (worshipper) as a non-entity because of his ceasing to be engaged in the performance of *puja* (worship). This fallacy, it is conceived, will also occur if the mind become obsessed with the idea that the *pujari* has no other functions to perform than the performance of puja.

It is clear from the above classification of *nayas* that the first four of them relate to things (*vāchya*) and the last three to words (*vāchaka*). The former are, strictly speaking, the true standpoints of philosophy, since the latter are employed specially by linguists, grammarians etymologists and the like. But since human speech is couched in words, and since the selection of words depends on the rules of grammar and is determined by their derivation and the like, the last three standpoints have also to be taken into consideration in the interpretation of the language of men as well of the scriptural text.

The above is necessarily a brief explanation of a subject which is capable of enormous amplitude.

We are nevertheless justified, in saying, as a result of the foregoing analysis of the different kinds of standpoints, that the *nayas* constitute the very foundation of the Science of Thought. They are not rules of logic as understood in its strict sense, but in a very much wider/thoughsimpler aspect. As Mr. A. B. Lathe points out (see 'An Introduction to Jainism,' p. 108) : " Logic, as applied to our present subject, is not a term denoting formal laws of thought. It constitutes the essence of Jain philosophy, without an adequate conception of whose importance, it would be impossible to realize the place of Jainism in the philosophical systems of the world, and the contribution it has made to the progress of human thought. * * * * *Anekant Logic* is the doctrine which means to examine the very foundations of knowledge, and also to explain the ontological problems that have beset philosophical speculation in all times. The value that Jainism itself attaches to this basis of its philosophy may appear extravagant to any superficial observer. It is asserted by a great Jain *Acharya* that this *logic* is as important as the Absolute Wisdom possessed by the *Kevalin*. It differs from the latter only in being 'indirect,' as distinguished from 'immediate' which is the characteristic of Absolute Wisdom. This loss caused by its

being 'mediate' (*Apratyakṣha* or *Shruta*) is fully made up by its exclusive capacity to demonstrate the truth of Absolute Wisdom to mankind. Thus Absolute Wisdom itself, not to speak of inferior degrees of knowledge, is baseless, without the *Anekant Logic.* Obviously, the reason of this is that this Logic is that which guarantees our capacity to know and provides us with criteria by which we should be able to test our knowledge. In one word, it may be called the 'method' of philosophy or that instrument of thought by which *Tattva-Jnyan* or philosophy is polished (*Sanskrit*). It bears therefore the all-comprehending sense that 'logic' is invested with in Hegel. It is in Jainism what the science of ideas is in Plato or the Metaphysics in Aristotle."

Coming to the place of *Nayas* in Jainism, it is to be observed that the most prominent feature of its philosophy is the quality of many-sidedness, the *anekānta-vāda.* If the reader has followed me thus far, he will have no difficulty in following me still further when I say that all one-sided systems of Thought are liable to error and inaccuracy because of their very one-sidedness. There are more aspects than one of each and everything in nature, and it is obvious that the system which deals, not with all such aspects but with only one of them, can have absolutely

no claim to perfection or comprehensiveness of knowledge. Jainism avoids this one-sidedness of outlook, and is enabled by the many-sidedness of its philosophy to deal effectively with all the moot points in their entirety. With the aid of its *Anekāntik* method, it effectually disposes of all those hard problems of theology and metaphysics which have proved a fruitful source of error and dispute to the followers of all non-Jaina religions in the world.

This many-sidedness of the Jaina philosophy is the true secret of its perfection, though modern Orientalists have hitherto only discovered it to be a feature of indefiniteness. If these gentlemen had taken the trouble to understand the primary basis of philosophy, they would not have failed to observe that all knowledge is only relative and has to be described from different points of view to avoid falling into the errors which abound in all departments of Absolutism. One can readily find an excuse for their error, especially as they are not philosophers but linguists, laboriously trying to force the concepts and ideas of a perfect system of living Thought into the imperfect and rigid frame-works of a one-dimensioned line of speculation.

True *naya* always predicates *one* of the innumerable qualities of a thing, without denying the rest. If it deny any of the qualities not under consideration, at any particular moment of time, it becomes *Nayābhāsa* —a fallacy, that is, a falsehood which appears to be a *naya*, but is not so in fact.

To conclude, the different kinds of *nayas* are the instruments of analysis whereby different aspects of things are isolated and studied from different points of view, and the *Saptabhangi* is the method of synthesis which sums up the results of investigation in logical thought. They are both essential to avoid the common errors of the *ekānta-vādins* of philosophy, and for arriving at the true nature of things. It is the philosophy of the *Syād-Vāda** propounded, in full, for the last time, by *Bhagwan Sri Mahavira Svami*, the last of the 24 *Tirthamkaras*, which is fully characterised by the feature of many-sidedness, the sole test of the integrity of knowledge, and which, in the words of a great American thinker, is "competent to descend into the utmost minutiæ of metaphysics and to settle all the vexed questions of abstruse speculation by a positive method (not merely asserting *na iti, na iti*, not so, not so)—to settle at any rate the limits of what it is

* See Appendix C

possible to determine by any method which the human mind may be rationally supposed to possess. It promises to reconcile all the conflicting schools, not by inducing any of them necessarily to abandon their favourite 'standpoints,' but by proving to them that the standpoints of all others are alike tenable, or at least, that they are representative of some aspect of truth which under some modification needs to be represented, and that the integrity of Truth consists in this very variety of its aspects, within the rational unity of an all-comprehensive and ramifying principle."

APPENDIX B.

BUDDHA AND THE JAINA CLAIM OF SOUL'S ABILITY TO ATTAIN TO OMNISCIENCE.

How Buddha received the Jaina claim that their Tirthamkara was omniscient, will appear from the following words of his own that have been preserved in the Buddhist records :—

"There are, brethren, certain recluses (*Achelkas, Ajivakas, Niganthas* etc.) who thus preach and believe, whatsoever an individual experiences, whether it be happy, or painful, or neutral feeling, all has been caused by previous actions And thus from the cancelling of old actions by tapas, and by abstaining from doing new actions there is no influx into future life, by this non-influx karma is destroyed and so ill is destroyed, and so all pain will become worn away This, brethren, is what the Niganthas say . Is it true, I asked them, that you believe and declare this? . . They replied . . . our leader, Nataputta, is all-wise out of the depth of his knowledge he tells us. ye have done evil in the past This ye do wear away by this hard and painful course of action And the discipline that here and now, by thought, word, and deed is wrought, is a minus quantity of bad karma and future life. Thus all karma will eventually be worn away and all pain. To this we assent " (Majjhima ii. 214 ff, quoted in the Encyclopaedia of Religion and Ethics, vol. ii p. 70),

Niganthas are, of course, the Jainas (Digambara Jainas), as shown by the Encyclopædia Britannica,

vol. xv. p. 127-128. Nataputta refers to the last Tirthamkara of the Jainas who was also known as Vardhamana Mahavira (Encyclopædia of Religion and Ethics vol. vii. 466.) Thus, it is evident that Buddha clearly refers to

(1) Bhagwan Mahavira,

(2) the Jainas, and

(3) the Jaina claim that Bhagwan Mahavira was all-knowing.

In Majjhima vol. i. pp. 92-93 another such passage is given in which Buddha refers to the claim that Bhagwan Mahavira was omniscient and all-perceiving and to the Jaina doctrines, and concludes with the important words :—

"this statement appears to be acceptable to me, and I consider it to be true"

It is not to be supposed that it was a mere passing whim or idle impulse of curiosity, unproductive of tangible results, that led Buddha to seek an interview with the Niganthas. He was fired with the ambition to acquire that all-wisdom which he had seen in the *Tirthaṃkara*, or some other Jaina *kevali* (omniscient) saint. His life thereafter was moulded accordingly. When enfeebled and worn out by *tapas* (ascetic practices) which did not lead

to the sought for enlightement, he did not abandon the idea as a chimerical pursuit, but sought to attain his object in some other way. For him omniscience was no myth! What he then said reflects the working of his aspiring mind, and bears eloquent testimony to his unshakable conviction. The actual words used by him then were :—

"Not by this bitter course of painful hardships shall I arrive at that separate and supreme vision of all-sufficing noble (Aryan) knowledge, passing human ken. Might there be not another path to enlightenment?" Encyclo. Religion and Ethics vol. ii. p. 70.

These two extracts furnish conclusive evidence of the following facts :—

(*a*) that Bhagwan Mahavira was a real historical figure, and not a myth :

(*b*) that he was a contemporary of Buddha ;

(*c*) that the claim to the omniscience of the *Tirthamkara* was openly made by the Jainas, whose religion teaches that every soul is endowed with potential omniscience, which is evolved out when it is about to obtain nirvana ;

(*d*) that Buddha was fired by the example of the Tirthamkara to acquire that wisdom

which he described in the most glowing of terms as

"that *separate* and *supreme vision* of *all-sufficing Aryan knowledge, passing human ken*";*

(*e*) that Buddha knew that it could be acquired by *tapas*, and performed severe austerities for its acquisition ;

(*f*) that *tapas* leading to no useful results in his case, he did not give up, but determined, if possible, to seek his ideal in some other way.

Buddha had, thus, no manner of doubt about the nature of omniscience and none about its acquisition by human beings. It was a certainty for which he

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* It will be noticed that every word of the vivid description is precise and exact and points to a distinctive mark of this wonderful all-wisdom. Their special significance is given below, to bring out the beauty of Buddha's description.

Separate	of a class by itself, different from the other kinds of knowledge, sense-perception., etc., etc
Supreme	the highest, the most exalted and excellent, to be distinguished from clairvoyonce, telepathy, etc ,
All-sufficing . .	all-embracing ; omniscient , infinite ; full and wanting in nothing.
Aryan............	peculiar to the Aryan people , not like a deceptive flash of illumination which non-Aryans may develop to some extent.
Passing human ken..	wonderful ; beyond, reason , which the understanding of man cannot grasp.

performed the severest austerities for years, and from the pursuit of which even enfeeblement, emaciation and repeated failure combined could not keep him away! Buddha must have actually seen the manifestation of omniscience, to have acquired the certainty. It may be added that there was no one else whose example could have fired Buddha's imagination at the time in this way; for none then claimed to be omniscient outside Jainism! It is also interesting to note that in the Anguttara Nikaya (iii. 74) Abhaya, a prince of the Lichchavis of Vaisali, refers to the Jaina affirmation of ability to attain to full knowledge and to annihilate karmas, old and new, by means of austerities (Outlines of Jainism, p. 31).

It would further appear that Buddha had actually adopted the rules of the order of the Jaina Nirgrantha monks at one stage of his life, for he used to pull out the hairs of his head and beard with his hands (see Saunder's Gotama Buddha, p. 15). This practice, termed *kesha-loncha* (pulling out hairs), is peculiar to Jaina Saints and is not observed by the monks and mendicants of any other faith.

And this explains what would otherwise be inexplicable in a Buddhist scholar and saint of the

standing of Dharma Kirti who actually cites the instances of Shri Rishabha Deva and Shri Vardhamana Mahavira, the first and the last of the Jaina *Tirthamkaras*, as endowed with omniscience, when illustrating some of his syllogistic propositions.

यः सर्वज्ञ आप्तो वा सज्योतिर्ज्ञानादिक मुपदिष्टवान्।
यद्यथा। ऋषभ वर्धमानादिरिति॥—न्यायविन्दु(परिच्छेदः ३)।

[Tr. Whosoever is an omnsicient teacher teaches the science of stars and the like, as Rishabha and Vardhamana (did) —The Nyayabindu, chap. III].

APPENDIX C.

LOGIC FOR BOYS AND GIRLS.

FOREWORD.

Teacher, has it ever occurred to you to find out why a simple rustic who knows nothing of the three *R*s and who is most certainly innocent of all pretensions to logic, immediately infers the presence of fire at the sight of smoke ? How do you account for the unerring accuracy of his inference in this matter ? Is it not that there is inherent in the human mind a natural capacity for valid deduction independently of a school or collegiate education ?

Well, this is what may be termed natural logic which, as you see, is a very simple thing. Compared with this the modern system of logic, which forms part of the higher education that is imparted only to advanced students, is but a bundle of tiresome forms and formulæ. It is cumbersome and too much loaded with technicalities, definitions and diagrams which only go to confuse the mind and confound the sense. Besides, it is meant only for a certain class of college students, is learnt with difficulty and is productive of no practical good outside. Natural logic, on the other hand, is a practical function of life, and, therefore, natural to every man, woman

and child. It only requires the drawing of attention to a few principles which can be understood and mastered by any one in a short time. For this reason, it can be taught to moderately intelligent boys and girls with ease. Most certainly the pupils who do not find it difficult to get on with Geometry will not find this natural logic to be burdensome. How quickly they master this branch of practical learning, depends on the way it is imparted to them. Certainly, their failure, if any, is to be laid at the door of their instructor. It is suggested that this little pamphlet be taught in the sixth class, to be followed by the *Pariksha Mukha* and the *Nyaya Dipika* respectively in the seventh and the eighth. These more advanced works are unfortunately at present only available in Sanskrit and Hindi, but they are sure to be translated into English as soon as there is a general demand for an English edition.

It would be out of place to compare in detail the method advocated here with what is taught as logic in our colleges, but it is well-known that the highest achievement of modern logic is the possession of a set of rigid diagrams and forms which it applies to each and every proposition to test its formal validity, quite irrespective of the question whether the statement

of fact or facts involved in the premises be, in reality, true or not. The least advantage to be derived from natural logic, on the contrary, is the acquisition of what may be termed the logical turn of mind that seeks to discover and establish actual relations among things and the true principles of causation of events in nature. The highest gain from this system of natural deduction must, consequently, imply a complete mastery over the empire of nature for our individual and racial good. Thus, while an artificial system of logic is in no way conducive to the advancement of knowledge, and is generally subversive of truth, the natural method is actually the source of all science and wisdom and capable of encompassing the highest good.

It only remains to be said that logic is the one science which is the crown of glory of Intellectualism. It is highly practical, useful in every department of learning, and the sweetener of life. It was logic which was truly the source of undying fame to the ancient *rishis* and philosophers of our land ; and it is logic whose neglect has reduced us to the lowest level of existence to-day. It is, therefore, the duty of every true well-wisher of India and Indians as well as of the entire human race, to spread the knowledge of this

most important science amongst men ; and most certainly it should be taught to our boys and girls in their childhood to impart to them the logicial attitude which is the source of all auspiciousness and good. This pamphlet requires no separate period to be set apart for logic ; it can be taught as a part of English literature during the time allotted to that subject.

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LOGIC FOR BOYS AND GIRLS.

Lesson I.

(A)

Q.—Children, it is Sunday to-day, can you tell me what day will it be to-morrow ?

A.—Monday.

Q.—Can you tell me why will it not be Tuesday, Thursday, Friday or any other day than Monday ?

A.—Because a Sunday is *always* followed by Monday, never by any other day.

Q.—Therefore, if I say that to-morrow will be Wednesday, will I be right ?

A.—No, sir, you will be quite wrong.

(B)

Q.—Children, I have a bunch of keys in my pocket, can you tell me how many keys are there in it ?

A. No, sir.

Q.—Why ?

A.—Because there is no rule by which the number of keys can be fixed in a bunch.

The above two sets of questions and answers establish the following principles, namely,

(1) an inference can be drawn from a fact if there be a fixed rule to guide the mind in that direction, and

(2) that no inference is possible where there is no fixed rule to guide the mind.

[The instructor should fix both these principles in the minds of his pupils by other similar illustrations.]

LESSON II.

Children, you were told in the last lesson that no logical conclusion could be drawn unless there was a fixed rule to determine the inference. We shall now consider two further illustrations to see what a fixed logical rule signifies.

1. Suppose I have always seen a milkseller pass my door shortly after sunrise every morning on his way to the town to sell milk, and suppose this has occurred regularly, without a single exception, for 50 years past and there is no one who can recollect to the contrary: can you say whether this milkman will pass my door to-morrow morning also ?

2. Suppose that I have a friend Z who is the father of one dozen boys and who has never had a girl born to him; suppose further that his wife is in the family way again: can yon say what will be the sex of his next child ?

The reply to both these questions is in the negative. In the first case, the milkman may fall ill, or may have some more urgent business to look after, or there may be no milk to sell at his place to-morrow in which case he will not go round; and in the second there is no such rule that particular individuals should always have boys and never a girl

We thus see that a fixed rule for logical inference does not mean merely a long course of events occurring in one particular way but something more. There must be a natural relation between the things which has not only held good in the past but which must also hold good in the future, e. g., youth succeeding childhood.

LESSON III.

There is a fixed logical rule to guide the mind from :—

(1) *Cause to effect,*

ILLUSTRATION.

Moist fuel if set burning produces smoke.

(2) *Effect to cause.*

ILLUSTRATION.

Where there is smoke there is fire.

(3) *Antecedent to consequent.*

ILLUSTRATION.

i. Monday following Sunday;

ii. Youth following childhood;

iii. Old age following youth.

(4) *Consequent to antecedent.*

ILLUSTRATION.

i. Saturday preceding Sunday.

ii. Youth preceding old age.

iii. Childhood preceding youth

(5) *Concomitance.*

ILLUSTRATION.

1. Age and experience.

2. Childhood and inexperience.

3. Marks of ripeness and deliciousness of taste in fruit.

(6) *Container and contained, i. e.*, the individual is included in the class, or what comes to the same thing, the part is implied in the whole.

ILLUSTRATION.

1. There is no fruit tree in this garden, therefore there is no mango-tree in this garden.

[The instructor should illustrate these logical relationships by other suitable illustrations of his own.]

Lesson IV.

Children, a conclusion may be drawn from an affirmative logical relationship, *e. g.*, wherever there is smoke there is fire. This is called the *anvaya* form. Hence when you see smoke, you may immediately say that there must be fire present at its source. But the sight of fire does not entitle you to conclude that smoke must be there too ; for while smoke is always caused by fire, every kind of fire does not produce smoke, *e. g.*, red-hot charcoal fire. There is also a negative form of the relationship of fire and smoke,—where there is no fire there is no smoke. This is technically known as *vyatireka.*

Thus from the relationship between fire and smoke, we can infer.

1. the existence of fire wherever there is smoke, and

2. the non-existence of smoke where there is no fire.

But we cannot infer.

1. the existence of smoke from fire, nor

2. the non-existence of fire where there is no smoke.

Anvaya and *vyatireka*, taken together, establish the validity of logical relationship.

APPENDIX D.

THE SYSTEM OF SYADVADA.

گرنه بیند بروز شپر چشم - چشمه آفتاب راچه گناه

[*If the bat's eye is unable to perceive things during the day ;—*
What fault therein of the Fountain of Light in the Sun ?]

* * * * * * * *

Many people have found fault with the doctrine or system of Syadvada, and even today there are men of education and culture who have not found aught but puerile wriggling and wrangling in it. Many of these men who have thus fallen foul of the doctrine are sincere thinkers, so that it is not possible to attribute the condemnation of the doctrine to bigotry and religious prejudice in each and every case.

Yet Syadvada is simplicity itself and an essential element of true metaphysics. Why it has not met with the appreciation its merit entitles it to, is due to two causes in the main, namely, firstly, the lack of exact thought on the part of the thinking men generally, and, secondly, the eccentric vagary of the human mind that delights in the discomfiture and bafflement rather than enlightenment of an opponent,

in argument. The system of Syadvada is a peculiarity of the Jaina Siddhanta, but the Jainas do not seem to have done much to remove the confusion of thought from the minds of men concerning the doctrine. The first of these causes will also tend to become accentuated by the natural human tendency to ridicule a pet theory of a rival Faith, and the present tendency of modern culture that encourages expression even at the cost of deliberation is not unlikely to add its venom to a sense of hatred or repugnance for a creed of seeming 'contraries' which the Jainas delight in postulating in the most bewildering way, and which appears, at first sight, to be nothing more than a glib denial of definiteness to thought and basic firmness to nature and nature's work

It is characteristic of the human mind that it is ever prone to condemn what it has not understood or what is beyond its normal ken. Hence, we are not surprised at the condemnation of the Syadvada by such men even as Prof. S. K. Belvalkar (see the " Under-currents of Jainism"). As already stated, the modern tendency is to encourage expression rather than reflection and sobriety of thought; and the modern *illuminati* delight to assert their opinion where the ancients would have hesitated even to open their lips. We are told in the article alluded to above:—

" *The dogmatic part of Jain Philosophy . . . . . is altogether irreconcilable when taken in coujunction with its dialectical part, viz., the famous Syadvada theory. As is well known, this theory denies the possibility of any predication : S may be, or may not be, or may both be and not be P. With such a purely negative or agnostic attitude one cannot afford to have any dogma ; and Shankaracharya lays his finger accurately on the weakest point in the system when he says :—' As thus the means of knowledge, the object of knowledge, the knowing subject, and the act of knowledge, are all alike indefinite, how can the Tirthankara teach with any claim to authority, and how can His followers act on a doctrine the matter of which is altogether indeterminate ?'* "

Such is the general expression of opinion of non-Jainas about the value of the Jaina system of Syadvada. We shall try to determine the merit of the doctrine in this article to ascertain whether the fault lies in the bat's eye that is not able to perceive things at noonday sun or whether there be in reality nothing to perceive in the shape of the 'Glories of Nature.'

Now, there is a marked conflict between the objects and in our description of them. The main differences are (1) in respect of the entirety of bundles of attributes and qualitics which are present in the

object all at once, but which human speech can only deal with one by one, and (2) in respect, of the negative qualities which human thought discovers and locates in the object, but which the object refuses to be burdened with. The first of these causes of conflict between the human expression and the object in nature is only too obvious to need any further explanation, for howsoever small or insignificant an object may be, it is nevertheless the repository of an infinity of attributes a great many of which are not even known to man. The second cause needs educidation here.

That Nature abhors vacuum is a well-known principle of science, and is recognized by all. But it is not generally realized that nature also abhors a a negation, and will not tolerate it on any condition. Of course, nothing but what is endowed with existence can possibly exist in nature ; for really nature only signifies the phases and aspects of existence itself. Hence all things are simply affirmances of existence and in no sense a negation thereof. This is the rigid rule of being, and it does not admit of a single exception. Whoever wishes to philosophise about nature must, therefore, always keep its living aspect in mind.

Human speech and human expression, however, constantly disregard this affirmative aspect of nature, both in ordinary conversation as well as in elegant and philosophical diction. We not only take the object as we find it, but we go farther and clothe it with a number of metaphysical attributes and relations which are pure abstractions formed in the mind. Some of these mental attributes are of a negative aspect, and cannot, of course, be found in the concrete object, e. g., a horse is not only a horse for the thoughtful mind ; it is also the negation of the cow, the buffalo, the donkey, the monkey, man, etc., ...till the entire list of things ' not-horse ' is exhausted.

The object, however, does not adapt itself to human thought in this respect, and, by the flat denial it gives to the artificial conceptions of men, by its own eternally affirmative appearance, it is ever ready to overthrow the half realistic half conceptual edifice of human speculation, unless care be taken to guard aginst the calamity from the very outset.

Besides these causes of disharmony between the object and human speech, there is another which is a constant source of trouble to the metaphysician. For we not only invest the object with abstract andnegative qualities in thought, but also resort to misleading

phraseology, which be will altogether unwarranted except for the fact that it is sanctioned by the rules of elegant diction and speech and long-established usage. For instance, we say *the pot is not black*, though we do not intend to deny existence to the pot, and really only mean the negation of blackness in it. Strictly speaking, we ought to say *black is not the colour of the pot*, but such metaphysical precision is never attempted in common speech which naturally enough woos variety of expression in preference to the dry bones of metaphysical accuracy. Yet the difference between the two expressions when interpreted with due regard to metaphysical strictness is great, and may be the cause of a lot of trouble to slip-shod intruders in the arena of thought. For while in the former expression, namely, *the pot is not black*, existence is denied to the pot itself, according to the strict rule of interpretation, the negation fixing itself on the nominative; in the latter, that is, *black is not the colour of the pot*, the negation rightly fixes itself on the attribute of blackness and leaves the pot untouched This, however, is a simple case, and difficulty is not likely to be experienced in its interpretation by many men. But it is well-known that the troubles of a metaphysician

are liable to increase with the advance of abstract thought.

We have seen how Swami Shankaracharya and Prof. Belvalkar both object to the position of the Jaina philosophy in the passage quoted from the 'Undercurrents of Jainism'—" S may be, or may not be, or may both be and not be, P ". The proposition is an eternal puzzle to the untrained mind that has failed to notice the conflict between the concrete object and its description in human speech. Yet, this is the very form in which nature presents herself to the human mind for conceptual thought. Let us see this illustrated.

Strychnine is one of the things that are fatal to life. It has killed many men, and many persons have taken it to commit suicide. From their point of view, it is the destroyer of life. Nevertheless strychnine also acts as the restorer of health, and consequently as the preserver of life, and many persons bear grateful testimony to its curative properties. From the point of view of these latter men strychnine is not the destroyer of life. We thus have :—

(1) S is poison when considered with respect to the cases of those that have been killed by it.

(2) S is not poison when considered with reference to the cases of those who have been cured by it.

HENCE,

S may be P and S may not be P at the same time.

Whether we consider the value of S with respect to the individuals who have been affected by it or with respect to the doses in which it was administered, the result will remain the same, since in some cases S will be P and in some not P. This gives us the first two propositions of the Jaina Syadvada.

The third proposition arises when we wish to define S not with respect to a small number of cases where it has acted as a poison nor with respect to those where it has acted as the preserver of health and life, but with respect to all cases indiscriminately at one and the same time. The question is: what is it to be termed then ? Here we are not considering its definition with reference to a particular group of facts where it is known to have killed men, nor with respect to another group of facts where it is known to have acted in a different way, but with respect to all men at one and the same time. If we now answer the question by saying that S is P (Poison), the answer is not descriptive of the entirety of the attributes of S. Similarly, if we say 'S is not P', it

will not be defining the object of enquiry fully, and will only yield half-truths that might prove to be very dangerous in certain cases. Thus what was true from a particular point of view, that is with respect to certain cases, is not true from the general point of view of all men. Should we, then, say that in some cases S is P, and in some other cases S is not P ? But this is really evading the question, in as much as it gives us the results of enquiry from two limited groups of facts, and does not answer the question that is put from the point of view of all men at once. We know S is P in some cases, and S is not P in some other cases, but we are not asking that now. What we ask now is what is S generally (that is, in all cases).

Shall we seek to answer this with the observation that it depends on the dosage whether S is P generally or not, or in some such other way ? This again will be an evasion, for in metaphysics we must have a direct answer to a direct question and not a diplomatic shunting off the track.

Here we are for the first time brought face to face with the short-comings of human speech which has no single word to express the thought that is surging up in the mind in answer to the question as

regards the nature of S generally. For while the mind is fully conscious of the nature of the action of S generally, speech fails it completely when its aid is sought to express the notion in words. Whoever will dwell adequately on the question : what is S generally *i.e.*, in respect of all cases—whether it is P. or not P ?—will soon understand the third category of the Jaina Metaphysics according to which S may both be and not be P. This is deseribed by a single word, '*avaktavya*,' which means indescribable. This is precisely what we meant when we sought to shunt off the enquiry with the words " it depends." The Jaina thinker does not seek to evade the difficulty by stratagem, subterfuge or even by diplomatic evasion. He is ready to give a direct answer to a direct question, but it is no concern of his, if the questioner happens to be good only at putting questions, and no further.

" It depends," and "it all depends," would be very good answers to our direct question, if they did not leave the door open to further discussion. As it is, the questioner is not satisfied and may insist on a direct answer to his direct question, as the cross-examining counsel does at times—' answer me with a simple yes or no ! '

To such a question, put with all the curt brevity of a metaphysical inquiry the Jaina Philosopher gives the one-word answer ' indescribable.' This simply means that the human language knows of no word which may be expressive of both affirmance and negation at one and the same time. Of course we are free to coin any technical term that will express the same object. " It all depends," will do equally well if taken as a technical expression, only it is not a single word and fails to express the true difficulty arising from the short-coming of human language which the word " *avaktavya*" fully expresses. In other words, it fails to express the real conception at the back of consciousness and tends to divert attention from the exact point by resort to the convenient pharseology of an easier matter of fact life.

We thus have three simple predications or judgments, *viz.*,—

(1) simple affirmation, *e.g.*, *S. is P.

* The word somehow (syat in Sanskrit) is intended merely as a signpost to draw the attention to the point of view from which the statement may be acceptable. Of course, it would be too tiresome to employ it in ordinary parlance, before every statement or part of a statement to indicate the standpoint of the speaker, but a metaphysician must mentally insert it at the beginning of each and every statement of a fact to arrive at an accurate valuation of the information conveyed therein.

(2) simple negation, *e.g.*, S. is not P.

(3) simple indescribability—(*avaktavya*), S. is indescribable.

By combining these three simple jugdments, in different ways, we get the following seven forms or modes of predication :—

(1) Affirmation from a particular point of view (*Syadasti*) : somehow, S. is P.

(2) Negation from a particular point of view (*Syannasti*) : somehow, S. is not P.

(3) Indescribability from a particular point of view (*Syadavaktavya*) :

Somehow S. is indescribable.

(4) Affirmation + Negation (*Syadasti nasti*):

Somehow S. is P. + somehow S. is not P.

(5) Affirmation + Indescribability (*Syadasti avaktavya*) :

Somehow S. is P. + somehow S. is indescribable.

(6) Negation + Indescribability (*Syannasti avaktavya*) :

Somehow S. is not P. + somehow S. is indescribable.

(7) Affirmation + Negation + Indescribability (*Syadasti nasti avaktavya*) :

Somehow S. is P. + somehow S. is not P. + somehow S. is indescribable.

The above are all the forms of human expression, and they mark the limit within which seeming contradictions are not necessarily antagonistic.

The difficulty with men is that they are ever prone to form an opinion hastily and without exhaustive research. To the bat's eye the glory of the day must undoubtedly be tantamount to total darkness, but then the bat's eye must be confind to its own little sphere of activity and kept from intruding upon human thought, where only an eye that is accustomed to light and the glittering brilliancy of the day can be our model and guide and the ideal.

It is apparent now that the charge of indefiniteness, brought against the doctrine of Syadvada has no foundation of fact any-where. As a matter of fact the system of Syadvada is more exact and determinate than all systems based on one-sided absolutisms. For the man who knows S. to be P. in certain cases, and not P. in certain other cases, and as indescribable in one aspect of its nature, and so forth, is certainly possessed of more definite information concerning it than he who only knows it absolutely as P. or as not P. The supposed contradiction, too, between S. being

P. and not being P. needs no explanation now. It is important to note that there can be no contradiction between statements made from different points of view, and that for real discrepancies, the assertion and the denial of a fact must proceed from one and the same standpoint. Many instances can be given from non-Jaina works of such contradictory statements which can in most cases be easily reconciled to one another with the aid of Syadvada; but not otherwise. Here is a striking instance in point from the Adhyatma Ramayana (Sacred Books of the Hindus series, Chap: 3. verse 23 :—

"*Though doing [acting] thou art no actor, though going thou art really not going. Though hearing thou art in reality not hearing, though seeing thou art not seeing.*"

Here it is quite obvious that the conflicting statements are made from different points of view and do not constitute real contradictions. We thus see that the doctrine of Syadvada is really a harmonizer of conflicts and not the producer of them.

APPENDIX E.

How to Master Logic in less than three Quarters of an Hour.

(From the Confluence of Opposites).

The first thing to understand is that in order to become an expert logician it is not at all necessary that the mind should be burdened with complex definitions and perplexing formulas to be found in modern text-books on logic. Real logic is a very simple thing and requires no technical terminology to be learnt by *rote.* This is evident from the fact that many illiterate men are highly rational and logical ; and even little children at times display a remarkable talent for accurate deduction. This should be impossible if logic depended upon the study of a highly complex and complicated system of technicalities, definitions and terminologies. The fact is that logic is simply the science of deduction with the aid of an invariable unalterable rule. If I ask you to tell me what day it will be tomorrow, you will immediately say, Tuesday, today being a Monday ; but you cannot tell me the number of keys in my bunch, nor the amount of money in my pocket, nor the metal of my watch, whether it be gold or silver or any thing else. The reason is that while there is a fixed unalterable

order according to which a Monday is *always* followed by a Tuesday, there is and can be no fixed invariable rule, neither nature's nor man's, that I would always have so many and only so many keys in my ring, or only so many rupees and neither more nor less in my pocket, or that my watch should be made of one particular metal and never of any other. If there were even one single exception in the case of a Tuesday following Monday, you could not say with certainty that it would be Tuesday tomorrow, for it might be the turn of the exception, in which case it would not be a Tuesday but some other day that would occur tomorrow. From these cases we can deduce the principle that wherever there is an invariable rule, *without a single exception,* there alone can a logical conclusion be drawn in agreement with that rule ; and that no proper inference is possible in the absence, or in defiance, of such a fixed unalterable rule. This is the one simple rule of logic which every one understands more or less clearly, and a text book must be deemed to have failed to fulfil its function if it muddle up such a simple proposition. It is according to this rule that the illiterate rustic, and, for the matter of that, even a moderately small child who sees smoke issuing from a place, immediately

infers the presence of fire there. Your cultured " text-book " logician also does this, but in an unnatural round about way. He will first of all construct a proposition in the form of a formula—

S. is P.

Here

S.=smoke.

P.=fire.

Hence, we have

Smoke is fire.

This is the first of the premises of a modern syllogism,

The second is—

This is smoke.

Our logician will now try to ascertain whether his middle (or common) term be distributed or not. But there is so much room here for error and bewilderment through technicalities and forms that he deserves to be congratulated if he can actually settle the point. We now have

(1) All S. is P.

(2) This is S.

as our permises, which, put in popular language, should read :

(1) In all cases smoke arises from fire.

(2) This is a case of smoke.

And now we are entitled to draw the conclusion—

∴ This smoke also arises from fire.

All this bewilderment, confusion and entanglement is avoided by natural logic, which simply requires a fixed rule to proceed upon.

The distribution of the middle term, I may point out here, is not in the nature of a special charm or magical formula designed to guarantee the validity of an Aristotelian deduction in some mysterious way. It is simly another way, and a highly involved one for that, of stating the logical principle which is the true foundation of deduction. For a term is said to be distributed when it is used in its entire extent, that is universally, in other words, when reference is made to all " individuals " or cases falling within its scope. Modern logic itself has to recognise that " inference always implies an effort on the part of the mind to see how phenomena are *necessarily connected according to some general principle* and, in carrying out this purpose, the mind *must being with the knowledge which it already possesses.* When the general law of connection is known, and the object is to discover the nature of some particular fact, the method of procedure is deductive. But when the problem by which we are confronted is to read out of the facts of sense-

perception the general law of their connection, the method of inference which must be employed is that of induction " (quoted from S. N. Banerjee's Handbook of Deductive Logic, pp. 80 and 81).

It is this necessary, general connection, the true basis of valid deduction, which Western logic endeavours to enunciate in the confusing and confounding " scholarly " terminology of text-books. No wonder that even college students find their brains in a muddle over it.

It is also to be noted that modern logic does not guarantee the accuracy of the conclusion though natural logic does. I shall again quote from Mr. Banerjee's excellent little text-book where he cites Dr. Ray:—

" In deductive or syllogistic reasoning we draw conclusions from given propositions as data. Given the premises, we infer the conclusion that follows necessarily from them. We are not in any way concerned to prove our premises; but our conclusion must be true, if the premises be true. Hence it is evident that the truth we arrive at by deduction or syllogistic reasoning is entirely of a hypothetical character, depending for its trustworthiness entirely on the trustworthiness of the data."

To illustrate the contrast between artificial and natural logic in this respect, it is perfectly correct according to the former to say:

(1) All men are fools ;

(2) Socrates is a man ;

(3) ∴ Socrates is a fool :

But it is simply impossible for natural logic to commit such a blunder, since it only proceeds where there is a fixed rule, and since there is no such fixed rule that declares all men to be fools.

It should be noted that every rule of practice does not give rise to a logical inference, no matter how long so ever it might have been observed and how strictly so ever followed. For instance, if a particular person has been known for the last fifty years to pass my door every morning without a single exception we cannot infer from this fact that he will for a certainty pass by my house tomorrow also, for there are a thousand and one reasons which might prevent his doing so. This shows that the true logical rule, termed *viyāpti* in Sanskrit, is something in the nature of a law which has not only held good in the past but which must hold good also in the future. A mere rule of practice will not do here.

There are five kinds of logical relations with reference to which it is possible to have a fixed rule (*vyāpti*) giving rise to logical inference. These are:—

(1) Cause and Effect,

(2) Antecedence and Consequence,

(3) Concomitance,

(4) Whole and Part, and

(5) Identity.

These five kinds of relationships give rise to seven kinds of inferences, as follows :—

(1) From cause to effect, e. g.,
Moist fuel is burning in the kitchen ;
∴ There is smoke in the kitchen.

(2) From effect to cause, e. g.,
There is smoke here.
∴ There is fire here.

(3) From antecedent to consequent, e. g.,
Monday following Sunday.

(4) From consequent to antecedent, e. g.,
Childhood preceding adolescence and old age.

(5) From concomitance, e. g.,

Age and experience going together.

(6) From the principle that the whole includes the part, *e. g.*,

There is no fruit tree in this place;

∴ There is no mango tree here

(7) Identity, *e. g.*,

There is no pitcher in this room ;

Because there is nothing answering its description (identity) here.

The last form of logical relationship might appear, at first sight, to be misplaced, as one is apt to regard the conclusion,

There is no pitcher in this room.—

as a fact of perception rather than a logical inference; but in that case we should have to assert that the eye can actually perceive *negations*, which would be ridiculous.

This finishes the entire subject; and I may add that there is no room for error in this method of inference if the *vyāpti* is carefully and scientifically tested. The final test of the accuracy of any particular *vyāpti* is the Scriptural Text, which, being the word of an Omniscient Teacher, holds good for all

times, the past, present and future. Hence, where one's own observation is supported by the experience of mankind in general and is also confirmed by the word of an Omniscient Teacher there is no room left for any manner of doubt there. This is the true function of Scripture which, as such, should be highly valuable as a Reference Book of Permanent Values.

We might pause here to compare the merit of the different systems of logic which have been known to prevail among men. These are

(*i*) the Jaina,

(*ii*) the *Naiyayika*,

(*iii*) the Buddhist, and

(*iv*) the European or Aristotelian methods.

Our treatment of the subject in this lecture represents the Jaina system. The *Nyaya* system bases the validity of inference on a homogeneous example (*saha-dharmi drishtānta*). Smoke was seen in the kitchen where there was fire; smoke is also seen on the mountion-top; hence there is fire on the mountain-top. There is no question of a scientifically valid *vyāpti*; the inference is not drawn by the force of a fixed unalterable rule, but simply from a homogeneous example. Even the safeguards against error laid

down in the form of fallacies do not place the subject on a scientific basis. The fallacies are five in number, namely :—

(1) The erratic, which implies that the reason is sometimes associated with the *sādhya* (that which is to be established) and sometimes with its opposite.

(2) The contradictory which is the reason that is opposed to the conclusion, *e. g.*,

A pot is a manufactured article ;
Because it is eternal.

(3) The 'equal-to-the-question' which reproduces itself, *e. g.*,

Sound is non-eternal ;
Because it is not possessed of the attribute of eternity.

(4) The unproved, which itself stands in need of proof, *e. g.*,

Shadow is a substance :
Because it is endowed with motion.

(5) The mistimed, *i. e.*, that which is adduced when the time in which it might hold good is past, *e. g.*,

Sound is eternal ;

Because it arises by union, like colour.

Properly amplified, the argument here comes to this that sound is like colour because the one is manifested by contact between a drum and a drum-stick, and the other by the contact of the light of a lamp with a coloured article. Now, since colour is eternal because light is only needed to reveal and cannot be said to create it, so, too, sound must be eternal. It is this kind of reason which is termed mistimed,—the basing of a conclusion on an example which has a diferent time-value.

This exhausts the list of *Naiyayika* fallacies, but it is evident that no such thing as an invariable logical relationship is established with their aid. The point of difference between the Jaina and the *Naiyayika* logic lies in the fact that while the latter draws an inference from a similar example in all cases except where an instance can be pointed out to the contrary,—the fallacy of erratic reason—or has not the same time-value, the former will refuse to draw a conclusion except where the reason on which it is to be based is a true logical *vyāpti*. The following illustration satisfies all the requirements of a *Naiyayika* syllogism,

but is nevertheless one on the accuracy of which no true logician will ever stake his reputation.

Illustration.

(1) The unborn child of Z. is a boy;
(2) Because he is the child of Z.;
(3) Like all the other childern of Z. who are boys.

Here the reason—the quality of being a child of Z.—is a homogeneous instance, and neither erratic, nor otherwise open to objection, but as there is no logical connection between it and any particular sex, there is no guarantee that the next child in Mrs. Z.'s womb will be a boy, too. The reason in this case has always been invariably attended by the *sādhya* (the fact to be proved) in each and every one of the homogeneous examples on the strength of which the deduction is made. It is certainly not erratic, because no one can point to the quality of being a child of Z. residing in a girl; and it is not mistimed, because it actually resides in the child in the womb all along, including the very moment of deduction.

It is sometimes said in defence of this element of weakness in Gotama's logic that possibly he only intended to throw the burden of disproving his statements and propositions on to his opponents, but even

if it be so it is a highly dangerous thing to base a logical conclusion on such slippery foundations, leaving it to some one else, if he be willing and able, to correct our errors.

The Buddhist logic, too, like the Nyaya system, ignores the scientific *vyāpti*, and does not hesitate to draw an inference from a homogeneous example, provided that the reason

(1) is found in *pakṣha*,

(2) and is present *sapakṣha*,

(3) but is not to be met with in *vipakṣha*.

In the following syllogism .

(*a*) There is fire on the yonder mountain-top.

(*b*) because there is smoke on it ;

(*c*) like the kitchen ;

(*d*) and unlike the lake :

(*e*) so, therefore, there is fire on the yonder mountain-top.—

the mountain-top yonder is *pakṣha* (the abode of the *sādhya*, the fact to be proved, here fire) ; the aleady observed kitchen is *sapakṣha* (*sa*=like+*pakṣha* *i.e.*, a similar place known to have been the abode of fire on a previous occasion) ; and the lake is *vipakṣha* (*vi*=*anti*+*pakṣha*). which is known to contain neither

fire nor smoke. But although these requirements are met in the instance of Z.'s unborn child, there is no knowing that the little imp will not upset the Buddhist calculations in revenge for having had his sex brought into controversy so early in its career.

Western logic, too, fails to come up to the mark, for not only is its syllogism artifical and unnatural, as must be fully evident by this time, but also because it is not concerned in arriving at truth. It is more like a method of interpretation than a science of accurate deduction.

No doubt, it is more exact than either the *Naiyayika* or Buddhist logic in its application, but its scope is almost wholly limited to determining—and here we must be fair to admit, with utmost precision—the contents of a given proposition or propositions, so as to ensure consistency of thought. According to Hamilton and Mansel, logic is merely the science of consistency and has no concern with the real relations of things. Mill and Bain certainly aspire to raise it to the dignity of a true science whose conclusions should conform to matters of fact, *i.e.*, the real relations of things ; but they leave it as cumbersome and unwieldy and artifical as ever. The practical value of modern logic as a science, judged from

the fact that its inferential processes are never actually resorted to by men—not even by lawyers, philosophers and logicians—in their daily life, is nil. Its innumerable technicalities and definitions entail a heavy burden on the memory, and its forms and formulas confound and confuse where they should illuminate and elucidate. It is the natural logic as described here to-day which can be taught to everyone however stupid ; and certainly it can be imparted to little boys and girls in the sixth and the seventh classes with the greatest ease. It is enlightening and assures consistency of thought, and thus sweetens life, while the modern method aspires for pedantry, is elucidative of nothing practical and ends with imparting the look of spectacled-learning to its devotee. Any one who has understood the subject, I am sure, will not differ from me when I say that the highest achievement of modern logic is the possession of a set of rigid formulas and diagrams for testing the formal validity of propositions, quite irrespective of the fact whether they embody actual truth or not, while the least gain from natural logic is the acquisition of a logical turn of mind that seeks to discover actual relations among things and the true principles of causation of events in nature. The highest gain

from natural logic must, therefore, imply a complete mastery over the empire of nature for the highest conceivable form of human good. It will be a great day for mankind when natural logic is freely taught to school boys and girls, and I trust it will even be introduced in some simplified form in primary schools.

This finishes the department of logic, which, I am sure, has not taken us more than three quarters of an hour to assimilate.

APPENDIX F.

Jaina Logic or Logic Simplified.

Logic with the Jainas is an astonishingly simple process, and can be understood in an incredibly short time by any one able to understand simple speech. The basis of inference is a rule, the logical law or relationship, that exists amongst certain objects. This will become quite clear by distinguishing between valid and invalid deduction.

There are three kinds of deductions, namely,

(1) where the conclusion is grounded upon some universal rule which does not admit of a single exception, *e. g.*, no smoke without a fire ;

(2) where it is not grounded upon any such rule, *e. g.*, 'A will live a hundred years';

(3) where it is reached in defiance of an invariable rule, *e. g.*, the smoke in the kitchen is not due to fire.

Of these three kinds of conclusions, the first is always valid, and therefore logical; the second is pure speculation—a kind of random shot which may or may not hit the mark—with a strong probability for missing fire; and the third is false reasoning.

The logical law, then, is that valid deduction is only possible where there is a fixed unalterable rule which does not admit of even one exception. Hence, the only thing one has to do to determine the logical validity of a statement, whether made by oneself or by another, is to find out if it be supported by a fixed unalterable rule or not. If the statement is grounded upon such a rule its validity is beyond dispute, and it must be declared to be true as a fact and logically correct. In any other case, it is either an instance of pure conjecture or of perverse reasoning.

This is the logical law, and this is all that one need know to be able to hold one's own against the sharpest wits in discussion and argumentation. This is the natural method; it is certainly the one employed by all thinking beings unconsciously, in adjusting the details of the daily routine of life. We may call it instinctive logic if we like; it is quite independent of tortuous technicalities and confusing formulas, and rests simply on a knowledge of the fixed relationship between certain connected objects, the one of which is never known to and may not occur without the other, in nature. Hence, the conclusion is not the outcome of a process of comparison,

or of deliberation in any other way; it simply flows the moment the attention is directed to find out the other term of the relationship on cognizance being taken of the one. Memory, rather than deliberation, would thus seem to be the principal factor in practical logic, though the particular memory that is sought out is not associated with the mark (the object that is logically connected with another object, *e. g.*, smoke is the mark of fire) along lines of similarity and contiguity, but of logicality, if I may be permitted to put it thus.

This is what is known as *svarthānumāna* (deduction at one's own instance) in the Jaina Logic, and it is to be distinguished from the *parāthānumāna* (deduction at the instance of another) which involves mental deliberation to a certain extent. But the principle of inference for both these types of deduction is the same as described above, which is a very simple thing. It must not, however, be supposed that Jaina Logic begins and ends with the simple description that I have given of it here. In point of fact Jaina logicians have placed the science of deduction on the pinnacle of perfection, as will be evident to any one who will read such masterly works as the Pramaya Kamala Martand that have been composed

on the subject. These are intended for those who want to make a scientific study of the subject, and are replete with technical terms and exhaustive elaborations, and require the closest attention to be studied.

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